

ESTABLISHED 1859

# THE CHEMIST & DRUGGIST

## COLONIAL ISSUE

APRIL 29, 1911

The Official Organ of Nineteen Chemists' Societies in the British Empire.

Head Office:  
42 Cannon Street,  
London, E.C.

Subscription Rate: 10s. per annum:  
Post Free to any part of the world.

Branches:  
Adelaide, Melbourne, and  
Sydney, Australia.

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### THE MARKETS OF THE WEST.

The New World is largely populated with natives of Great Britain. Their homes and their daily tasks may be in Canada, the United States, Newfoundland, South America, or the West Indies, but they never lose their preference for articles from Home. That is why manufacturers of medicinal proprietaries, perfumery, toilet-articles, optical, photographic, and surgical goods, and dealers in drugs and chemicals of British origin find the

#### New World Issue

of THE CHEMIST AND DRUGGIST so useful in bringing new business. The publication date this year has been fixed for

May 20.

### Summary.

The more notable items only are dealt with.

The Idris strike is over (p. 104).

The new dispensing charges which have been authorised in Italy are mentioned on p. 142.

A condensed list of the trade creditors of John Clarke & Co., Ltd., Belfast, is printed on p. 110.

Notes on the new galenical preparations of the new German Pharmacopœia are printed on p. 139.

Several important Transvaal tariff interpretations are communicated by our Pretoria correspondent (p. 143).

A drug company in London has been fined for not making certain annual returns to Somerset House (p. 109).

Keen interest is manifested at present in the quality of liquorice-juice, so that Mr. Parry's article on p. 133 is timely.

In view of the spurt now given in company pharmacy a communication on how to meet such competition should be informative to many chemists (p. 144).

Local authorities in the north are trying to teach small shopkeepers by means of the Sale of Food and Drugs Acts that they should leave sweet spirit of nitre severely alone (p. 109).

There is too much materia medica in Pharmacopœias, for medical students at least. This opinion comes from America. The report of the discussion at which it was expressed is on p. 156.

An iniquitous order has been promulgated in Russia under which anyone there may make foreign proprietary preparations which are permitted to be imported into the empire (p. 120).

This week's Corner for Students prizes go to Mr. James Puddepham and Mr. A. C. Walton, and the tournament prizes to Mr. James Hendry, Mr. Puddepham, and Mr. Alfred Hall (pp. 102-3).

Quicksilver is 5s. and mercurials 1d. per lb. lower. Buchu, menthol, wahoo-bark, pimento, and coconut oil are more or less higher. Bergamot, lemon, and orange oils are firmer (p. 129).

A number of drug-store keepers have been called upon by the Pharmaceutical Society to pay fines for selling belladonna-plasters, which some imagine are not on the poisons schedule, which is wrong (p. 120).

The Committee of Members of Parliament which is working to get new food and drug legislation includes secret remedies in its purview. We give this week some special information in regard to their doings (p. 119).

In the event of medical treatment being part of the Government sickness assurance scheme, knowledge of the German system will be useful to British pharmacists. The latest particulars of it and other Continental methods are given on p. 116.

The Shops Bill got into Grand Committee of the House of Commons on Thursday. Mr. Glyn-Jones is trying to get consideration of the assistants' clauses postponed until his new clause restricting the opening of all retail shops to seventy hours per week is disposed of (p. 112 and p. 119). Liverpool chemists object to certain provisions in the Bill (p. 120), and Glasgow chemists are divided in opinion (p. 125).

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## CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus: "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

### Report on April Analytical Exercise.

THE powder distributed to students on March 29 contained 5 parts by weight of lead chloride, 4 parts of potassium nitrate, and 1 part of sodium metarsenite. The calculated composition of such a mixture is:

Pb	...	...	...	...	37.2
K	...	...	...	...	15.5
Na	...	...	...	...	1.8
Cl	...	...	...	...	12.8
NO <sub>3</sub>	...	...	...	...	24.5
AsO <sub>2</sub>	...	...	...	...	8.2
					100.0

The powder also contained, as impurities, a carbonate in small proportion and a distinct trace of iron.

Samples of the powder were distributed to 62 students, and 25 reports were sent in for examination. The failures in the detection of the several constituents of the powder were: (a) Metallic radicals:—Lead, 1; potassium, 8; sodium, 5. (b) Acid radicals:—Hydrochloric, 3; nitric, 4; arsenious, 11. Eleven students did not detect the presence of the carbonate, and of five students who detected arsenium in some form, but did not recognise that it was present as an arsenite, one reported it as arsenate.

This was not on the whole a difficult exercise, but one or two points which do not always get as much attention as they deserve required to be carefully attended to in order that correct results might be obtained. We find that students are, as a rule, disposed to deal with the arsenium group in a decidedly perfunctory fashion and to arrive at conclusions with respect to it on very insufficient grounds. Mistakes regarding this group were made on the present occasion in several ways. A few students precipitated the whole of the lead along with the arsenium as sulphides, then digested the washed precipitate with yellow ammonium sulphide, filtered, and to the filtrate added dilute hydrochloric acid in excess, thereby obtaining a precipitate which consisted largely of sulphur. This precipitate was very pale yellow in colour, and in several instances it was put aside unexamined, on the assumption that it consisted of sulphur only. Others separated the greater part of the lead as chloride before adding hydrogen sulphide. The sulphide precipitate then obtained consisted mainly of arsenious sulphide, but it also contained some lead sulphide. Its colour was distinctly orange, and closely resembled that of antimonious sulphide. This resemblance apparently led one or two students to assume that the precipitate consisted of antimonious sulphide, and to report the presence of antimony without making any further experiments to show that it really was present, and also without making any attempt to prove that other metallic radicals were absent. We would impress upon all of our correspondents who have been misled regarding

this matter that there is no royal road to the determination of the composition of an arsenium-group precipitate except that of a complete and minute analysis, and that conclusions arrived at solely by inspection of the colour of a precipitate which may contain a variety of substances are exceedingly liable to be erroneous.

Failure to apply the ammonium-molybdate test for phosphates at the proper stage (*i.e.*, after the removal of the sulphides precipitable by hydrogen sulphide in hydrochloric-acid solution, hot and cold) led several students to conclude that a reaction really due to arsenate showed the presence of a phosphate. They applied the ammonium-molybdate solution to the original substance, and, as the properly prepared reagent contains free nitric acid, this oxidised the arsenite into arsenate, and the latter then gave a yellow precipitate which was indistinguishable by mere inspection from the corresponding precipitate obtained when a phosphate is present. Had the test been applied after the removal of the arsenium as arsenious sulphide, the non-formation of a yellow precipitate would have proved the absence of a phosphate.

Four students who detected arsenium in the systematic examination for metallic radicals did not report any tests to ascertain whether or not it was present as an arsenite. This is a point which should not be overlooked, since it is, of course, desirable to find out the form in which arsenium is present when it is possible to do so.

Commercial alkali-metal arsenites usually contain a distinct proportion of the corresponding carbonates, and the metarsenite used in preparing the mixture contained some sodium carbonate which had remained undecomposed by interaction with arsenious anhydride in the preparation of the salt. The quantity was sufficient to produce a tolerably distinct effervescence when the powder was treated with dilute hydrochloric acid, and we have been surprised that this should have escaped the notice of so large a proportion of our correspondents.

While the failures in detecting the nitric-acid radical were not very numerous, the fact that there were any failures in the case of a mixture containing that radical to the extent of almost 25 per cent. is in itself a clear indication that moderate care has not always accompanied the application of the tests for it. As regards the few students, who, besides missing the nitrate, reported a bromide, we can only advise them to practise with known nitrates and bromides, separately, and also with mixtures of both with chlorides, until they are able to recognise a nitrate and a bromide separately or together in the presence or in the absence of a chloride with ease and certainty. Such problems may, by careful practice and close observation, be made matters of certainty in any ordinary case.

### PRIZES.

The first prize for the best analysis has been awarded to

JAMES PUDDERPH, 84 Far Gosford Street, Coventry.

The second prize has been awarded to

A. C. WALTON, 1 Winchester Street, Nottingham.

*First Prize.*—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

*Second Prize.*—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

## MARKS AWARDED FOR ANALYSES.

## 1. Correspondents who are unqualified:

J. Puddepha (1st prize) ...	97	Stink Cupboard ...	63
A. C. Walton (2nd prize) ...	96	Test Tube ...	63
Rego ...	93	Prunus ...	62
The Pup ...	91	Sulphate ...	61
Ivanhoe ...	88	Bromide ...	60
Despair ...	86	Bunsen ...	58
C. G. O. ...	76	Rare Chemical ...	58
Vol. ...	74	Duty ...	55
Bradford ...	69	Archio ...	54
Perseverando Vincens ...	66	Rex ...	45
Phoca ...	65	Estudiante ...	24
Phosphate ...	64		

## 2. Correspondents who are qualified:

Nitrax ...	79	Spirogyra ...	96
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## TO CORRESPONDENTS.

**J. PUDDEPHA.**—We could not detect even a trace of an ammonium compound. May traces of ammonia in the air of the room have changed the colour of the red litmus paper?

**THE PUP.**—Although you proved the presence of arsenium, you should have proved that antimony and tin were absent. You should also have shown that the arsenium was present as arsenite.

**IVANHOE.**—The results of your analysis are substantially correct, but your report is too slender. It is not sufficient to write "Filtrate shows absence of Bi, Cu, Cd": the steps taken should be indicated. Compare the reply immediately preceding.

**DESPAIR.**—Note that silver nitrate gives a brown precipitate—not a yellow one—with a neutral solution of an arsenate; also that an arsenite when boiled with nitric acid is converted into an arsenate, and that the latter yields a yellow precipitate with ammonium molybdate.

**C. G. O.**—The reaction with ammonium molybdate which you attributed to a phosphate was really due to the arsenate formed as indicated in the reply immediately preceding.

**VOL.**—Note that pungent whitish fumes are not evolved when chlorides are gently warmed with dilute sulphuric acid. You describe—not very accurately—the borax-bead test as yielding "No results," and add "No inferences." You no doubt mean that there was no positive result, but in absence of such, surely the inference was that manganese, copper, cobalt, etc., which yield positive results, were probably absent.

**BRADFORD.**—We are quite unable to reconcile your experiments and conclusions regarding halogen acids and organic acids with the facts of the case. You appear to have proceeded upon a preconceived notion that a tartrate was present. The precipitate you took for calcium tartrate probably consisted of calcium arsenite.

**PHOCA.**—You do not state how the solution was prepared to which you added silver nitrate and obtained a white precipitate, from which you concluded that a nitrite was present; but as you had previously found a chloride by means of silver nitrate, the evidence obtained from this test was not of much value in any case.

**BROMIDE.**—Does it not strike you as an odd proceeding to boil a substance with water and sodium carbonate, and then, after neutralising the resulting solution with nitric acid, to apply a test for a carbonate?

**RARE CHEMICAL.**—We do not understand why you obtained a reaction with silver nitrate which appeared to indicate the presence of only a very small proportion of a chloride, as much more than a trace was present. Read the last sentence of the reply to "Bradford."

**DUTY.**—Considering the number of tests for bromide and for nitrate that you appear to have applied, it seems strange that you should have concluded that the former was present and the latter absent.

**ARCHIE.**—The colour of the silver-nitrate precipitate in presence of nitric acid was white (silver chloride); in a neutral solution, when excess of silver nitrate had been added, it was yellow (silver chloride and silver arsenite mixed). You say you got a red-brown precipitate, confirming

arsenate, but you do not describe any operation which could have converted the arsenite into arsenate. Had you used sodium hydrogen tartrate instead of tartaric acid in testing for potassium, it is probable that you would not have failed to find the potassium.

**REX.**—Seeing that for years we have advocated the postponement of coming to any conclusion regarding the presence of potassium until the flame-test or some other test has been applied to a solution suitably prepared from the residue obtained on boiling down the filtrate from the barium group, it is somewhat crushing to read in your report that you ignored this residue because we had suggested that flame-tests applied to it were of little or no value.

**ESTUDIENTE.**—We have not been able to trace the fate of several residues and filtrates mentioned in your report. For example, you left undescribed any treatment of the ammonium-sulphide filtrate which might contain arsenium, antimony, and tin, and of the residues which might consist of mercuric sulphide and of lead sulphate respectively.

**SPIROGYRA.**—Thanks for your appreciation. We congratulate you very heartily on your well-earned success in the tournament, and are pleased to learn that you have been successful in the "Major." Our congratulations on this latter success also.

## THE TOURNAMENT.

The analysis reported upon in the foregoing is the concluding exercise in the analytical tournament announced in September last for the Winter Session then opening. Seventy-two students in all took part in the competition, and, as on previous occasions, while a high standard of excellence was attained month by month by a somewhat limited number of competitors, good useful work was done by many. Almost the only matter for regret is that a number of those who begin in October fall away before the close, and so diminish considerably the interest which would otherwise attach to the competition as a whole. It now only remains to give the names and scores of the prize-winners, to offer to each of them our congratulations on the successful completion of their sustained efforts throughout the winter, and to ask them to be good enough to communicate with the Publisher as soon as possible, naming the books they desire to have as prizes.

The first place has been taken by "Spirogyra" (Mr. James Hendry, Gowan Lea, Banchory), with the very satisfactory aggregate score of 554, made up of 82, 98, 99, 80, 99, and 96, and to him the first prize of books to the value of 2l. 2s. and a certificate have been awarded.

The second place and the prize of books to the value of 1l. 1s., with a certificate, have been taken by "Sunshine" (Mr. James Puddepha, 84 Far Gosford Street, Coventry), with the excellent aggregate score of 543, made up of 82, 92, 83, 94, 95, and 97.

The third prize of books to the value of 10s. 6d., with a certificate, has been awarded to "Rego" (Mr. Alfred Hall, Old Museum, The Banks, Durham), whose aggregate score amounts to 496, made up of 80, 74, 96, 82, 71, and 93.

**SOYA-BEANS IN CEYLON.**—The cultivation of the soya-bean in Ceylon is mentioned in a brief report sent by the American Consul at Colombo. He says: "The soya-bean, which has come into prominence recently owing to its commercial value, has now been successfully experimented with in Ceylon. The Agricultural Society secured a large quantity of seed some years ago from the Far East, and experiments were carried out at Peradeniya, but the cultivation proved a failure. The Secretary of the Ceylon Agricultural Society has now succeeded, however, in turning out a large crop in the Government stock gardens in Colombo, producing two varieties, the Japan (white seed) and the Java (black seed), and seed will shortly be available for distribution. It is expected that the cultivation of the soya-bean will be taken up largely in Ceylon, for, besides its value as an article of food, it can be exported to the European and American markets."

## ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

### Brevities.

Mr. J. Birkett, chemist, The Crescent, Morecambe, is carrying out effective alterations to his pharmacy.

An epidemic of dog poisoning has broken out at Gerrard's Cross, Bucks. No fewer than twenty dogs have died recently from strychnine poisoning.

At Bexhill-on-Sea window-dressing competition last week, the Lion Drug-stores, Ltd., secured the first prize in the section open to chemists and other traders, and also the third prize in a class for All-British foods.

At the annual conversazione of the Selborne Society, on May 5, the chair will be taken by Lord Avebury, while a lecture will be given on "The Eggs of Butterflies and Moths," illustrated by photographs by Mr. F. W. Noad Clark, pharmacist.

The Yarmouth Guardians, upon the motion of Mr. J. S. Shearman, chemist, have decided to appoint a medical officer for a vacancy in one district for professional services only, and to engage a chemist to supply all medicines required. Previously the medical officers have been paid salaries including cost of drugs.

The Postmaster-General announces that on May 1 the rate of postage charged in Australia on letters for the United Kingdom and all other parts of the British Empire, including Egypt, will be reduced from 2d. the  $\frac{1}{2}$  oz. to 1d. the  $\frac{1}{2}$  oz.

The memorial to the late Alderman George Edward Bridge, chemist, Deputy-Mayor of Bournemouth and Mayor of the Borough from 1907 to 1910, is to take the form of a portrait in oils to be hung in the council chamber, with a replica to be presented to the family. The fund has not yet been closed, and up to the present 103*l.* 8*s.* has been subscribed.

The Berwick-on-Tweed chemists announce that in future their pharmacies will be closed on Thursdays at 1 p.m., and will open again from 5.30 to 7.30 p.m. On other weekdays except Saturdays the business will be suspended at 7.30 p.m., and on Saturdays at 9 p.m. On Sundays the hours of attendance will be, 10 a.m. to 10.30 a.m.; 12.30 p.m. to 1.30 p.m.; and 6 p.m. to 8 p.m.

At a recent meeting of the Ammanford Urban District Council, it was reported that the Health Committee had decided that Mr. Evan Evans, chemist, Ammanford, should be asked to keep a supply of antitoxin. However, it appeared from the statement of the medical officer (Dr. Price) that the request had been made at the suggestion of the medical officer for the county at a conference of medical officers throughout the county. The clerk said that any order should come through their own medical officer, and that the medical officer for the county had no right to interfere with their district.

### Proposed New Science Museum.

The Departmental Committee report in regard to the present condition and future development of the collections in the Science Museum, South Kensington and the Geological Museum, Jermyn Street, London, W., has been issued. The object of the Committee's appointment was to advise as to the precise educational and other purposes which the collections can best serve, the lines on which the collections should be arranged and developed, and the characteristics which should be possessed by the new buildings which, it is hoped, will shortly be erected on the South Kensington site, to house the collections. The Committee find that the collections are so much crowded that their due classification and utilisation are impossible. Buildings twice the size of those now used would be fully utilised by the existing collections without the addition of a single specimen. The Committee suggest that it would be of advantage to establish an advisory committee, and that the new buildings should include provision for an enlarged suite of workshops. A conference room, where scientific or technical societies might meet, a large lecture theatre, public demonstrations in the galleries, and

the exhibition of temporary collections are also suggested. In many departments of science the objects are of great historical interest, being rich in specimens, instruments, models, etc., selected in such a manner as to repay systematic examination by the student. However, the collections are in many cases far below the standard, but their proper organisation is impossible in the existing accommodation.

### Bee Disease.

The Board of Agriculture and Fisheries, Whitehall Place, London, S.W., desire to inform bee-keepers in Great Britain that their scientific advisers are conducting investigations into the causes and characteristics of the disease among bees now prevalent in many counties, and which originally made its appearance in the Isle of Wight. The Board would be glad to receive communications from bee-keepers whose bees are diseased, and who are willing to supply information likely to be of service in the investigations. A statement of the points upon which it is desired to obtain particulars will be sent on application. Information as to new outbreaks in districts only recently infected is especially desired. Bees should not be sent to the Board until asked for.

### Idris Strike.

At a Board of Trade Conference on April 24 in connection with the strike at the works of Messrs. Idris & Co., Ltd., Camden Town, London, N., it was agreed, after three hours' discussion, "that the Board of Trade appoint an officer to inquire into the facts of the dispute at the factory, and, meanwhile, the firm will make every effort to reinstate, as soon as possible, all the employees who ceased work on or after April 11, the firm undertaking not to discriminate in any way against strikers, upon the resumption of work, for any part taken in the strike." Mr. T. H. W. Idris and Mr. William T. W. Idris attended at the Board of Trade Offices at the request of Mr. Askwith. The strikers' representatives agreed to withdraw all claim to the reinstatement of any of the workers who had been discharged, but the company promised to do its best to find work for the remaining strikers, although their places had been filled up. The terms of the agreement were signed by Mr. T. H. W. Idris and Mr. W. Idris (on behalf of the firm); Miss McArthur, Mr. Mallon, and Miss Mollison, and countersigned by Mr. Askwith and Mr. I. Mitchell. The girl strikers held a demonstration in Trafalgar Square on April 22.

### Poison-licences.

The Clitheroe Town Council on April 20 unanimously resolved to renew the poison-licence held by Mr. John Ellis, seedsman, for a year.

Mr. Alfred T. B. Kell (Raydient Manufacturing Co.), 8 Eldon Square, Newcastle-on-Tyne, has applied to the Town Council for a poison-licence.

### Anti-Opium Society.

The annual meeting of the Society for the Suppression of the Opium Trade was held on April 24 at Caxton Hall, Westminster, under the chairmanship of Sir Matthew Dodsworth, Bart. The annual report, the adoption of which was proposed from the chair, stated that this year's meeting found the Society rejoicing in the practical settlement of the main branch of the opium question. A resolution was adopted welcoming the prospect of an agreement between Great Britain and China which would permit the possibility of a complete ending of the trade within a period of one year, or at most within two, congratulating the Government on so truly interpreting the mind of the people of England at this crisis, and expressing the hope that no pressure from India would be permitted to interfere with the speedy conclusion of the proposed agreement. The Venerable Archdeacon A. E. Moule, who seconded this proposition, said that one of the dangers against which the people of China would have to guard themselves, in view of the complete extinction of the opium traffic, was the insidious use of morphia by hypodermic injection. The importation of morphia and the instruments by which the operation was performed had been forbidden by the Customs authorities of China, and watchful care against their use, except for medical purposes, was being exercised by the missionary doctors.

The most important resolution passed, so far as pharmacy is concerned, was moved by Mr. Swift MacNeill, M.P., and had relation to the forthcoming International Opium Conference at the Hague. It urged the Government to appoint delegates to the Conference who are thoroughly in sympathy with the objects in view, who should be furnished with instructions definitely to promote the restriction of opium, its derivatives, and other similar poisonous drugs to their legitimate medical use alone; to take measures for applying these restrictions within British possessions and Protectorates in the East, and to discard the practice of raising revenue from opium as a dangerous expedient, unworthy of the British nation and Christianity.

#### Birmingham Notes.

Mr. O. W. Evans, of the Pharmacy, Bourneville, has a good photo of Mr. Graham White's Farman biplane, which came to Birmingham from London last Monday.

Mr. W. R. Selleck, Ph.C., has been appointed Chairman of the Stourbridge Water Board. The appointment has heralded an increase of revenue and a decrease in the working hours of the employés.

The death took place last Wednesday of Mr. E. H. Hill, Broadwas Court, near Worcester. He was a member of the vinegar firm of Messrs. Hill, Evans & Co., at Worcester, and chairman of the directors. He was a great benefactor, and built and equipped for Suckley a nurses' home, hospital, and workmen's club.

#### Birmingham Drugs.

In his annual report, Mr. J. F. Liverseege, F.I.C., Ph.C., the Birmingham city analyst, states that of 104 samples of drugs examined during the year twenty-two (or 21 per cent.) were adulterated, this being the highest figure since 1905. Mr. Liverseege accounts for the variation of from 5 to 26 per cent. in adulteration during the last nine years by the fact that the term "drugs" includes such a large variety of articles, and that the samples taken each year differ. Two unqualified traders were chiefly responsible for the increase in adulteration last year. One of them prepared six adulterated samples of seidlitz powders, and another vendor sold five adulterated drugs. Twenty-two of thirty samples of seidlitz powders were sufficiently near to the B.P. standard to be passed as genuine. The powders in the blue papers were on the whole satisfactorily weighed, but in nine instances the powders in the white papers differed more than 10 per cent. from the proper quantity of tartaric acid. Two of these samples were marked, "Every powder is weighed to ensure accuracy." Six samples obtained from two shops (and from the unqualified hawker who supplied the shops) contained no Rochelle salt; in four samples the powder was sodium bicarbonate only, and in the other two samples a mixture of three parts of sodium bicarbonate and one of sugar. Summonses were taken out against the vendors of the adulterated samples, but the unqualified hawker who supplied the shops absconded. A formal sample of compound rhubarb powder, bought under the name of Gregory's powder, contained 80 per cent. of magnesium carbonate. The vendor was prosecuted. One sample of magnesia was composed of carbonate. One sample of white precipitate ointment was zinc ointment; another was too strong (containing 13.4 per cent. of ammoniated mercury), while a third bought from the same shop contained only 7.1 per cent. The vendor said it was from the same pot as the previous sample, and Mr. Liverseege suggests that probably the proper amount of ammoniated mercury had been used, but the sample had been very badly mixed. Three of the six informal samples of borax contained small quantities of arsenic, but the vendors were not qualified pharmacists. Four samples of boric acid were genuine and two adulterated; five of the six informal samples of saltpetre were almost free from lead, but one contained twenty-four parts per million. A prescription ordering one part of yellow mercuric oxide ointment to be mixed with three parts of vaseline was wrongly dispensed, the mixture only containing half the proper quantity of mercuric oxide.

#### Leicester Pharmacy Athletic Club.

A billiard handicap, arranged amongst the members of the Leicester Pharmacy Athletic Club has lately been

carried through. Sixteen players entered, most of whom showed good form. The handicapping, which was experimental, proved very good, some very close finishes resulting in several of the heats. Eventually Messrs. Chawner and Tomlin proved themselves the experts, and the final heat between these two resulted in a win by Mr. H. F. Chawner. Mr. F. Fry took a consolation prize for the highest break in the handicap.—The fixture-list of the club for the cricket season has just been issued. There is a full card of twenty matches, commencing with the Captain *v.* Vice-Captain's teams' practice match on April 27. Mr. E. Tomlin succeeds Mr. Marfitt this year as captain.

#### From Various Courts.

At Lytham Police Court on April 20, a Bolton herbalist, named George Wm. Goode, was fined 20s. and costs for causing indecent handbills to be posted.

At Hull Quarter Sessions on April 25, James Robinson was sentenced to eight months' hard labour, and Alexandra Wilson to six months' hard labour, for stealing money from the pharmacy of Mr. T. W. Agar, chemist, 30 Londesborough Street, Hull.

At the Central Criminal Court on April 25, the Recorder, in concluding the Bloomsbury chloroform case (*C. & D.* April 1, index folio 459), said that under all the circumstances, and as Hamer and Brumwell had been in custody since February, he would bind them over in their own recognisances of 100*l.* each to come up for sentence if called upon.

At the Central Criminal Court, London, on April 26, Kate Babington Albert (28), office cleaner, who pleaded guilty, was sentenced to twelve months' hard labour for using instruments for an unlawful purpose. Mr. Justice Grantham said prisoner had deliberately made a trade of the crime, and it was an inhuman trade which should be stopped.

At Sheffield, on April 20, three youths, named Morement, Hickman, and Yeardeley, pleaded guilty to thirteen cases of shop-breaking, etc., including one at the premises of Boots, Ltd., Attercliffe Common. Morement, as ring-leader, was sentenced to three months' imprisonment; Yeardeley was sent to a reformatory for five years; and Hickman was placed on probation for a year.

At the Central Criminal Court, London, on April 26, the charge against Ernest William Ansdell (24), van-washer, of administering a noxious thing (calcium bisulphite) to Annie Olive Wilcox and Arthur Wilcox, of Camberwell, was dismissed. (*C. & D.*, April 8, index folio 497.) The prosecution admitted that Miss Wilcox might have had access to the chemical at the place where she worked. The Judge said so far as he could see there was no evidence as to who put the bisulphite in the tea.

In the High Court, King's Bench Division, before Mr. Justice Scrutton and a common jury, on April 25, the hearing was begun of a libel action brought by Mr. George Cecil Jones, A.C.G.I., F.I.C., F.C.S., consulting chemist, 43-45 Great Tower Street, against the publishers, editor, and printers of the "Looking Glass," a weekly journal. The ground for the action was the association of complainant's name with one Aleister Crowley, and his connection with the Rosicrucian Order, against whom allegations were made in a series of articles entitled "An Amazing Sect."

At Marlborough Police Court on April 24, Dr. James Farquhar, of Burbage, was committed for trial on a charge of perjury (*C. & D.*, April 22, index folio 563). Mr. G. E. Pearmund, advertising manager for Messrs. Oppenheimer, Son & Co., in the course of further evidence, said that in their diary for 1911 there was on a back page facing the cover an advertisement with a gold border. In the books for the three previous years there was no such gold border on that page. A fragment of similar gold border occupied a corresponding position on the same page in the doctor's diary. Mr. Kenneth W. Oppenheimer, director of the company, gave corroborative evidence. Mr. Wethered, on behalf of accused, admitted that the notes produced last April were not the original notes made in 1908, and the defendant's statement to that effect was false. He said the explanation was a simple one. Dr. Farquhar was an old man, and he had always

prided himself upon keeping the most careful record of all his cases. But he lost the notes he made in 1908, and when he could not find them he wrote down from his memory his recollections of the case. That was an act of folly rather than an act of crime.

#### Contracts.

Fareham Urban Council.—Mr. E. Neville, Ph.C., Fareham, appointed chemist.

Swindon Hospital Board.—Williams & Co., Ltd., Swindon, appointed chemists for six months.

Barnsley Education Committee.—Mr. W. A. Bellamy, chemist, Barnsley, for the annual supply of chemicals.

Stourbridge and Halesowen Hospital Committee.—Greenwood & Sons, chemists, Lye, for the year's drug supply.

Aylesbury Urban Council.—Mr. E. T. Palmer, chemist, Aylesbury, for okul disinfectant during the ensuing year.

Hertford and Ware Hospital Board.—Mr. J. H. S. Lewis, chemist, Ware, for the six months' supply of medical sundries.

Littleborough Hospital Committee.—Mr. W. Nall, Ph.C., Milnrow, for drugs; Hall & Son, chemists, Littleborough, for disinfectants.

Rishton Urban District Council.—Sanitas Co., Ltd., for okul fluid, and Killgerm Co., Ltd., Cleckheaton, for disinfectant powder, during the ensuing year.

## IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

#### Personal.

Mr. Henry Thackeray, Ph.C., has removed from Queen Street, Dublin, to South Great George's Street.

Mr. William F. Wells, Ph.C., President of the Pharmaceutical Conference, 20 Upper Baggot Street, Dublin, has been elected a member of the Select Vestry of Baggot-rath Church, Pembroke.

Mr. Wm. Haslett, ex-President of the Chemists' and Druggists' Society of Ireland, has been elected Vice-President of the newly formed Ballynafeigh and Newtownbreda Unionist Club, Belfast.

At the meeting of the Boyle Board of Guardians on April 22 Mr. M. D. Carroll, Ph.C., was elected Apothecary to Boyle Union Hospital and No. 1 and 2 Dispensaries by 37 votes to 4 for his opponent.

At Armagh Quarter Sessions on April 21, Mr. Wm. Orr, registered druggist, was awarded 7l. 10s. compensation for the malicious breaking of a window in his premises on January 17 during a riot following a municipal election. There were thirty-one similar cases.

Mr. W. C. Dobbin, of Messrs. Wm. Dobbin & Co., chemists and druggists, North Street, Belfast, has been elected a member of the select vestry of St. Barnabas parish, and Mr. R. H. Orr, druggist, Ormeau Road, has been elected a sidesman of St. Jude's parish church.

Mr. James E. O'Neill, J.P., principal of the firm of O'Neill & Co., druggists, of Maghera, has been re-elected without opposition a member of the Magherafest Board of Guardians and District Council. For the past three years Mr. O'Neill has been Chairman of the Board. Mr. O'Neill is also a member of the Londonderry County Council, and has been unanimously selected candidate to contest the County Division of Tubbermore at the coming Local Government elections.

#### Guardians' Affairs.

The Cork District Asylum Committee have given the contract for medicines to the Youghal Auxiliary Asylum to the Cork Chemical & Drug Co., at 37½ per cent. discount, and medical appliances to Messrs. Fannin & Co., Dublin, at 40 per cent.

At the meeting of the Limavady Board of Guardians last week a letter was read from Mr. Walter Thorp, analyst, pointing out that his remuneration is inadequate,

and asking the Board to increase his salary 10l. It was resolved that Mr. Thorp's salary be increased by 3l., making the full amount 10l., and if he is not willing to accept this he may tender his resignation and the Guardians would re-advertise the position.

The Finance Committee of Belfast Board of Guardians has fully considered the question of taking samples of articles under the Sale of Food and Drugs Act for the purpose of analysis, and the position of the analyst appointed by the Guardians in relation to proceedings under the Acts. Considerable correspondence has taken place recently on the subject, as to whether or not a certificate by an analyst other than a public analyst is necessary in a prosecution under the Act, and the Local Government Board have referred the Guardians to the decision of the King's Bench Division (Ireland) in 1909, and state "that a certificate of a public analyst is an indispensable requisite in a prosecution under the Sale of Food and Drugs Act, 1875." The Committee has now instructed the Master that in future samples taken for the purpose of prosecution should be sent to the public analyst.

## SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

#### Aberdeen.

The Aberdeen Parish Council have accepted the tenders of the following chemists: Messrs. P. D. Milne, McHattie, Bythe, Glennie, Birnie, Cran, and W. G. Mitchell.

Mr. J. F. Tocher, B.Sc., Peterhead, is delivering a course of advanced lectures on statistical methods at the University. The classes are held in the medicine classroom, Marischal College, on consecutive Wednesdays.

#### Edinburgh.

Monday last was the Spring Holiday, and most of the retail shops were closed the greater part of the day.

The Pharmacy Athletic Club Sports are to be held this year at the Edinburgh Marine Gardens, on June 5.

The Spring Holiday Competition of the Edinburgh Chemists' Golf Club was held over North Berwick Burgh Course, with the following results: 1st (Captain's prize), G. F. Merson, 91 net; 2nd, J. Noble, 95 net; 3rd, Geo. Robertson, 100 net.

A deputation from the Edinburgh Merchant Company, including Mr. James L. Ewing, ex-Master, is in London for the purpose of interviewing members of Parliament regarding amendments in the Shops Bill.

In the Adelphi Hotel, on Tuesday evening, Mr. F. W. Clements, the late Hon. Treasurer of the Edinburgh Pharmacy Athletic Club, who is leaving the city to go to the United States, was presented with a silver cigarette case, suitably inscribed, the gift of a few friends in the club.

#### Glasgow and the West.

The Botanic Gardens are once more assuming new life, and prospective "Yorkers" should start early in order to acquire a thorough knowledge and familiarity with the specimens.

Photographic chemists would do well to have a good stock on hand for the Royal Procession on May 3. They will have to supply the wants of a regiment of "Camer(a)onians."

A petition for the winding-up of the Scottish Chemical Co., Ltd., has been presented to the Court of Session, at the instance of Mr. J. Williamson, 65 West Regent Street, Glasgow. An interlocutor has been pronounced dated April 18, allowing answers within eight days of intimation.

St. George's Co-operative Society are now notifying shareholders that their drug department stocks cigarettes, tobaccos, and cigars, also that Mr. Alex. Jarvie, surgeon-dentist, will act as dentist to members of the Society. The drug sales for the quarter ended March 31 amounted to 226l. 12s. 4d., and a dividend of 1s. 10d. per pound is declared to shareholders.

At Greenock on April 25, Hugh Lees, described as a chemist, was fined 3l., or alternatively to undergo twenty

days' imprisonment, for stealing from the premises of the Greenock Medical Association. The Secretary of the Association said that accused was engaged to take the place of the ordinary dispenser, who was on a holiday. On his checking the cash at night it was found that three parcels supposed to contain 1*l.* each contained in coppers 6*½d.*, 8*½d.*, and 9*d.*

At a meeting of Girvan Parish Council held last week a letter was read from Messrs. A. G. B. Patterson and W. K. Blair, chemists and druggists, Girvan, drawing attention to the fact that on two different occasions they brought their claim before the Council regarding their right to supply medicines, and on both occasions the result was very unsatisfactory. They again asked the Council to consider the matter, otherwise they would be compelled to place the matter before the Local Government Board and get its opinion. Mr. McIlwraith said the writers were using a threat. It was pointed out that the matter had been previously gone into, when it was shown that it would involve the rescinding of the Council's agreement with the medical officer. After discussion it was agreed that the Council should take no action so long as the present agreement with the medical officer exists.

## FRENCH NEWS.

(From the "C. & D." Paris Correspondent.)

**A RARE EVENT.**—The sale of a pharmacy by auction is announced to be held at the offices of M. Huillier, notary, at Paris, on April 27. The pharmacy in question is the old-established Marcotte officine, at 90 Faubourg St. Honoré, facing the Palace of the Elysée, the official residence of the President of the French Republic. The upset price is 100,000 fr. (4,000*l.*), which, however, may be reduced.

**M. ANTOINE LUMIÈRE**, one of the founders of the well-known photographic business at Lyons, died in Paris on April 15, aged seventy-two. He started the plate factory in conjunction with his two sons in 1883, and the production of the autochrome plate in 1907 may be considered a culminating point in the history of the firm. M. Antoine Lumière had been living in retirement for some years, devoting his leisure to landscape painting.

**CONGRESS OF PHYSIOTHERAPY.**—The third Congress of Physiotherapy of doctors speaking the French language was successfully held last week at the Paris Faculty of Medicine. The Congress was organised by the Societies of Electrotherapy, Radiography, and Kinesotherapy, and was open to French, Belgian, Swiss, and Canadian doctors interested in physiotherapy. An interesting exhibition of apparatus was held in connection with the Congress.

**SERIOUS FIRE AT SYPHON WORKS.**—The well-known manufactory of syphons and seltzer water apparatus belonging to MM. Guéret Frères, 72 Boulevard de la Gare, Paris, was destroyed by fire last Saturday night, April 21, when damage to the extent of over 100,000*l.* was done. The fire broke out at about ten o'clock and quickly spread over the entire establishment. It is probable that a hundred workpeople will be deprived of employment for several months.

**PROFESSOR CAZENEUVE HONOURED.**—A prophet who is not without honour in his own country is Professor Cazeneuve, Senator of the Rhone Department. His friends and admirers organised a gathering at Lyons, and presented him with a bronze (Chapu's "La Pensée") as a token of the services he has rendered in Parliament to hygiene and science in general and pharmacy in particular. M. Vaudin, President of the General Association of French Pharmacists, Professor Livon, of Marseilles, and M. Boge, of the Eastern Pharmaceutical Association, and the Prefect of the Rhone, were among the company.

**IN ABSENTIA.**—A curious case was tried in one of the Parisian police courts recently. A pharmacist habitually absents himself, leaving the officine in charge of an unqualified assistant all day long, merely attending from 5 to 7 p.m. Were both pharmacist and assistant illegally practising pharmacy? No, pleaded the pharmacist, for all

prescriptions were made up during his presence in the evening. Business during his absence was restricted to the sale of mineral waters and put-up goods. The Court declined to accept this defence, and fined each of the delinquents 20*l.*; 8*l.* damages being awarded to the Pharmacists' Association, who acted as prosecutors.

**"ONLY FOR FUN."**—An unlucky practical joke has got a young pharmacy student, M. Alexis Le Breton, twenty years of age, into trouble, as was explained in a Paris police court a few days ago. He accosted one day a policeman in the Boulevard Montmartre and showed a revolver loaded with five bullets. "Is this a prohibited arm?" inquired the student of the representative of law. The latter remonstrated with the young man, who interrupted him with, "I know it is a prohibited arm, but I want to be arrested." "But why?" asked the policeman. "Only for fun," was the reply. The magistrate accommodated M. Le Breton with six days' imprisonment.

**THE RENEWAL OF PRESCRIPTIONS.**—A Syndical Chamber of French doctors was formed last year for the purpose of protecting the interests of the profession. One of the points they have taken up is to endeavour to prevent pharmacists from dispensing medicines containing poisonous substances without a renewal of the prescription. The pretension evidently appears, to say the least, a somewhat exaggerated one, and the Syndicat lost the action they brought, judgment being given against them on the ground that no prejudice had been caused. The defendant of the test case in question was M. Mansencau, a well-known pharmacist of Compiègne, who was charged with having on two occasions dispensed medicine containing syrup of morphia, tincture of digitalis, and tincture of belladonna in small doses without the prescription being renewed. Several doctors of Compiègne who were called as witnesses unanimously agreed that the renewal of the preparation presented no danger.

**CO-OPERATIVE INSURANCE.**—The yearly report of the Confraternal Association of French Pharmacists shows a nominal capital of nearly seven million francs (280,000*l.*), while one million (40,000*l.*) has already been paid to the families of deceased members. A reserve fund of 2,000*l.* has been formed. When this reaches 4,000*l.* (presumably in ten years' time) the interest will be utilised for the diminution of the yearly premium payable by all members of over twenty years' standing. The present annual premium is about 8*l.* and is payable by monthly instalments. The working system is simplicity itself. When one member dies, every surviving adherent pays 10*fr.* (8*s.*) to his widow or next of kin. If the number of adherents could be raised to a thousand, as is hoped, this would make 400*l.* on each death, but so far this figure has not been attained. The entrance fees vary, 21*fr.* at thirty years of age, 51*fr.* at forty-five. All French and Algerian pharmacists are eligible for membership.

**FREE MEDICINE IN LOUIS XIV.'S DAY.**—M. Léon Le Grand publishes an article in the "France Médicale," pointing out that the free distribution of certain remedies at the King's expense was systematically organised two centuries ago. Louis XIV. granted Helvetius a fifteen-years' patent or monopoly for the sale of his 'specifics against dysentery, etc., and between 1706 to 1709 about 50,000 "doses" per annum were distributed to the governors of various provinces. Brittany and Artois were granted 4,000 doses apiece, and the rest in proportion. The most popular of these remedies was the "specific powder" against "bloody flux and dysentery"; but Helvetius also prepared a purgative febrifuge powder, a vomitive powder, a sudorific paste (for provoking perspiration), purgative pills, diuretic balm, alum pills, quintessence of absinthe, etc. Theriaca, hyacinth, and other electuaries, cinchona, ipecacuanha, and similar remedies were distributed in the same way. All appear to have been put up in five-sou doses.

**THE METRIC SYSTEM.**—Almost immediately after the adoption of Greenwich time by France, the International Bureau of Weights and Measures has held its usual biennial meeting at Paris, or, to speak more accurately, in the Park of St. Cloud. This coincidence has led Parisian newspapers to suggest that it would be a graceful act on the part of Great Britain definitely to decide on adopting

the metric system in the same official and thorough manner as France has accepted Greenwich time, giving international unification preference over local preferences and prejudices. The number of countries adhering to the Convention du Mètre, and having the right to send representatives to these biennial gatherings, is now twenty-six; and the Bureau has existed for thirty-six years. Although usually alluded to as a "French" system on account of its origin, the metre is nowadays not only practically universally recognised in Latin countries on both sides of the Atlantic, but compulsory in many other lands, the adhesion of Germany in the 'seventies being the real hallmark of its international character. It is perhaps less generally known that some of the outlying portions of the British Empire have adopted the metre, its usage in the Seychelles is ancient, Malta is one of the most recent adherents. The Australian House of Representatives has passed a resolution in its favour by a large majority, and the Colonial Premiers expressed similar sentiments by a general vote some ten years ago, and in the United States it is largely used for geodetical, medical, and generally for scientific purposes [as it also is in the United Kingdom, its use being sanctioned by law.—Ed.] All these "straws" are cited by a Parisian contemporary as proof of the possibility of the final adhesion of the British Empire to the Metric Convention. This would practically unify the system of weights and measures in every civilised country in the world. We live in an age of international agreements—witness the Geneva Convention, the Latin monetary union, the international time agreement for railways, etc., and schemes scouted as visionary half a century ago are almost yearly becoming realities. It would be a bold statement to assert that in half a century's time, money, weights and measures will not be unified (or at any rate arranged on a definitely proportional and interchangeable system of assets) throughout the two hemispheres. The income of the International Bureau (about 4,000*l.* a year) is derived from subscriptions from the Governments which adhere to the Convention, the sums being based on population and other details. Thus Great Britain, where the system is not compulsory, pays less than Germany or France, but all these great nations subscribe their hundreds of pounds per annum, while a small State may pay little more than a 10*l.* note for the same privileges.

## CANADIAN NEWS.

(From the "C. & D." Correspondent.)

**MONTREAL COLLEGE OF PHARMACY.**—The forty-third annual session was brought to a close at a smoking concert in the assembly-hall of the college. Mr. David Watson presided, and with him on the platform were Messrs. W. H. Chapman, Vice-President, D. W. Bole, Arthur Lyman, and other friends of the college. Mr. Chapman presented the diplomas, and Professor St. George the medals (see *C. & D.*, April 22, index folio 567).

**DRUGGISTS' CORPORATION.**—On March 21 the annual meeting of the Druggists' Corporation of Canada, Ltd., was held in Toronto, when many of the shareholders from both Toronto city and the outlying points were present. The company is a co-operative organisation composed of retail druggists, formed for the purpose of purchasing and manufacturing proprietary and pharmaceutical preparations direct. The financial statement presented was satisfactory, and it was decided that the list of articles dealt in should be largely increased for the coming year.

## OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

**A Van t'Hoff Fund.**—It is proposed to establish a Van t'Hoff fund in Rotterdam on the lines of the Nobel Prize, the proceeds of the endowment being devoted to a prize to be granted for services to the science of chemistry.

**Pharmazeutische Gesellschaft.**—In the absence of Professor Hermann Thoms, Dr. Mannich presided at the April meeting of the Deutsche Pharmazeutische Gesellschaft in Berlin, when Dr. Jeserich, for thirty-three years chemical expert to the law courts, gave a lecture on blood analysis.

**Assistants' Salaries.**—In an article in the "Apotheker Zeitung," Dr. Salzmann (President of the Apotheker Verein) condemns the proposed foundation of a salary fund for pharmacists' assistants on the lines of the system obtaining in Austria, and suggests the substitution of private insurance for pharmacists' assistants. Herr Salzmann points out that the formation of a salary fund contributed to by pharmacy proprietors would not improve the position of the older assistants, who find it difficult to obtain posts.

## OUR AMERICAN LETTER.

(Special Correspondence to the "C. & D.")

**A Municipal Drug Store** is a novel proposition recently made in Boston. It was urged upon the Mayor with a good deal of force at a recent meeting for the discussion of public measures, the idea being that the people ought to have an opportunity of getting medicines at all hours and at cost price. The Mayor, however, thought this would be going a little too far toward paternalism in a free country, and refused to entertain the idea.

**An Unjust Inspector.**—It is the irony of fate that a Government inspector of drugs in Philadelphia has been sent to gaol for nine months for the illegal sale of cocaine and other narcotics. His name is Benjamin Ashmead, and he is incidentally a druggist in Philadelphia. He made a cloak of his work as Government inspector, but the Pennsylvania Board of Pharmacy caught him, and are to be congratulated on the excellent work they are engaged on in discovering and convicting violators of the anti-narcotic law.

**Dispensing Doctors.**—To pass laws to prohibit physicians from dispensing their own medicines represents a movement which has been debated with a good deal of heat during the last few years. So far three or four such measures have been introduced in State Legislatures, only to meet with failure. The Pennsylvania State Pharmaceutical Association favoured such a Bill last year, but the Legislative Committee now declares that it would be unconstitutional, and refuses to act. This has caused a storm of dissent to break out, particularly in the country districts of the State, and the dissenters may after all decide to introduce a Bill and take their chances with it.

**Formulae on Label.**—Every year several legislative measures are introduced which have for their purpose the compulsory printing of the formulae of proprietary articles on the label. Druggists' own specialities would, of course, be involved as well as patent medicines. It is usually expected that the patent-medicine barons will purchase the death of these Bills with cold cash, and the measures have consequently become known as "pinch" Bills. One known as the Fahey Bill is now pending in Pennsylvania, and the druggists are up in arms over it. A great difference of opinion has arisen concerning it, and during the last few weeks accusations have been hurled backward and forward with a great deal of freedom.

**Itinerant Vendors.**—The National Association of Retail Druggists has recently received a serious reverse in its attempt to secure laws in the various States to tax itinerant vendors. Several such measures have been secured, but a decision has been given by the Supreme Court of Illinois, declaring that the law of that State is unconstitutional in that the tax imposed of \$1,200 a year is practically prohibitory, that no valid restrictions can be made on the sale of things like patent medicines, and that the Act gives the druggists of the State virtually a monopoly in the sale of such substances. Inasmuch as this Illinois vending law has been used as a model in other States, it looks as though the whole movement will collapse. The itinerant vendors are keen competitors of druggists, especially in the country districts, and it is therefore easy to understand why the drug-trade is anxious to obliterate them.

**Mr. Samuel W. Fairchild** (who is now on his way to Europe) presided at a dinner given by the Union League Club at the Club-house, Fifth Avenue and Thirty-ninth Street, New York, on April 8, in honour of its six living ex-Presidents, who sat with him at the guests' table. They were Joseph H. Choate (1873-76), Chauncey M. Depew (1886-92), General Horace Porter (1893-97), Elihu Root (1898-99), Cornelius N. Bliss (1902-06), and George R. Sheldon (1907-10). More than 300 members of the club were present, among them being Messrs. Andrew Carnegie, George B. Cortelyou, Benjamin B. Odell, jun., J. Van Vechten Olcott, Henry F. Shoemaker, and John A. Wyeth. The President gave the toast of "The Guests." The principal address was by Mr. Choate, who dwelt upon old days in the Union League Club, its motives and traditions. He showed a placard of his first appearance in politics in 1856, in the Frémont campaign.

## LEGAL REPORTS.

### TRADE LAW.

**Sale of Liqueur Chocolates.**—At the Manchester City Court on April 26, Mr. Edgar Brierley (stipendiary) gave his decision in the case reported in our issue of April 22, index folio 568. The defendant sold "Chartreuse" chocolates which were proved to contain 8 per cent. of proof spirit, and he was summoned for selling spirits without a licence. Mr. Brierley said that there was no definition of the word spirits in the Finance (1909-10) Act nor in the Acts referred to in the first schedule. In his opinion spirits must be taken in their ordinary meaning, and he thought "Chartreuse," "Kumel," and "Cognac" were all comprised within such meaning. He held that as there was a substantial quantity of proof spirit, averaging 10 per cent., in the liquor-chocolates mentioned such articles were spirits within the meaning of the Act. There must be a conviction. He imposed a fine of 5*l.*, and an order was made for defendant to pay ten guineas costs.

**A Drug Company's Returns.**—At the West London Police Court on April 26, Mr. Garrett heard summonses taken out at the instance of the Board of Trade against Vincent's, Ltd., chemists and druggists, of Jordan Place, Fulham, for failing to forward to the Registrar of Companies a list of members of the company, with summary as to capital and shares, and a statement of assets and liabilities for the year 1909. There were also summonses against James Williams, a director of the company, for permitting default to be made. Dr. Ginsberg appeared to support the summonses, and Mr. H. Pierron for the defence. Dr. Ginsberg stated that the company was registered in May 1908 with a capital of 2,000 *l.* shares, and there were two directors, James Williams and Mary A. Williams. The contention of the defence apparently was that the company was not a private company, and that it had never carried on business; but by the articles of association it claimed the right—not permitted to a private company—of transferring shares to the public, and there was evidence that goods were exposed for sale in the shop which bore the words "Vincent's, Ltd.," on the label. Moreover, as additional proof that the company carried on business, there was the fact that it had borrowed money on mortgage. Evidence in support of this statement was given, after which Mr. Pierron submitted that the offence, if any, was purely technical. The company was formed by the family of the Williamses, and no shares had ever been offered or intended to be offered to the public. The matter was left in the hands of the solicitor, and the articles of association, which described the company as a private company, were passed by the Board of Trade. He (Mr. Pierron) submitted that it was a bad proposition in law to argue that because a company was not private it must therefore be public, and he contended that this particular family arrangement amounted to a partnership. Mr. Garrett observed that he could not understand how it was that the Board of Trade omitted to notice in the articles of association the description of the company as a private company, when, as a matter of fact, it could not possibly be a private company at that time, because Section 37 of the Act of 1907, which dealt with private companies, had not then come into operation. It was registered as a public company, and, as it had never since become a private company, the proper return ought to have been made. He imposed a fine of 5*l.*, with fifteen guineas cost. The summonses against Mr. James Williams were dismissed.

### High Court Cases.

Unless when otherwise stated these cases have been heard in the High Court of Justice, London.

#### SACCHARIN CORPORATION *v* KOLKER.

In the Chancery Division on Wednesday, April 26, before Mr. Justice Neville, Mr. Colefax moved *ex parte* in this case for an interim injunction restraining the defendant, Mrs. Jennie Kolker, from dealing with two parcels of saccharin. Counsel said that an action for alleged infringement of the Corporation's patents was brought against one White in respect of saccharin imported into this country in 1904 and in 1908. White was ordered to deliver up the saccharin on oath. Mrs. Kolker was bringing an action in the King's Bench Division claiming the saccharin now in question, which was saccharin alleged to be the subject of the order made against White, and the object of the interim injunction was to prevent her charging or assigning the goods pending the trial.—Mr. Justice Neville thought no harm could be done to the defendant to restrain her over Friday next from dealing or parting with her interest in the saccharin, and accordingly granted an

injunction over that day with liberty to serve short notice of motion.

### A MISSING DENTAL SURGEON.

A petition was presented in the Bill Chamber of the Court of Session, Edinburgh, by James Brydon & Sons, grocers, 8 High Street, Hawick, and Mrs. Jessie Crawford, or Kirkwood, 10 Strathearn Place, Edinburgh, for the appointment of a factor *loco absentis* to Hugh Kirkwood Oswald, L.D.S., dental surgeon, some time residing at 39 North Bridge Street, Hawick. The circumstances under which the petition was presented were these. Mr. Oswald left his home on March 26, and has not since been heard of. Messrs. Brydon & Sons are creditors on Oswald's estate to the extent of 11*l.* 9*s.* 4½*d.*, and Mrs. Kirkwood is the sole guarantor of an overdraft now amounting to 456*l.* 13*s.* 5*d.* allowed by the Royal Bank of Scotland to Oswald. He has not left anyone in charge of his affairs, and the book-debts due to him, the instruments, appliances, and materials used by him in his business at 39 North Bridge Street, Hawick, and the furniture and furnishings of the house and the goodwill of the business are so far as known to the petitioners the only assets belonging to Oswald's estate. Intimation of the petition and answers were ordered within eight days by Lord Sherrington. That was done, and as there were no answers lodged, Lord Cullen has now granted the prayer of the petition, and appointed Mr. James Conn, solicitor, Hawick, to be factor *loco absentis* as craved.

### Sale of Food and Drugs Acts.

#### SWEET SPIRIT OF NITRE.

At Doncaster Borough Police Court on April 24, George J. Harper, general dealer, Carr House Road, Doncaster, was summoned for selling sweet spirit of nitre, which, upon analysis, had been found to contain only 0.42 of ethyl nitrite. In reply to the Town Clerk, who prosecuted, Inspector Innocent said the object of the prosecution was not so much to punish the defendant as to teach him not to sell things he did not understand. Defendant's solicitor said, as the result of the proceedings, Mr. Harper had been quite ill. He kept the shop in addition to working outside, and it was only as a convenience to the neighbourhood that he sold the sweet nitre. Only 4½ oz. had been sold in four months. Defendant admitted he did not know much about sweet nitre, and should not sell it again. He was ordered to pay the costs, 18*s.* 6*d.*

At Bolton on April 24 four shopkeepers were summoned before the Borough Bench for having sold sweet spirit of nitre deficient in ethyl nitrite. One case was withdrawn; and the Deputy Town Clerk (Mr. D. L. Harbottle), in prosecuting for the Corporation, only made remarks concerning the cases of Thomas Mellor, 21 Fylde Street; A. Crook, 244 Crescent Road; and William Murphy, 318 Manchester Road. Mr. Harbottle stated that shopkeepers who were not qualified chemists sometimes put this spirit in large bottles in the window, and sunlight caused the chief ingredient to evaporate, the shopkeepers being unaware of the nature of the spirit and the proper way to store it. The Corporation did not want to press these cases, Mr. Harbottle added, but wanted the volatile nature of the spirits to be drawn attention to. Acting to his suggestion, the Bench dismissed the summonses on payment of costs by defendants.

Before the Croydon County Bench (Mr. E. Byron, chairman, and Mr. Densham) on April 22, Mr. James Noble, chemist and druggist, 8 Woodcote Road, Wallington, was summoned, under Section 6 of the 1875 Act, for selling sweet spirit of nitre which was certified to be deficient of alcohol to the extent of 40 per cent. Mr. Noble pleaded not guilty, and was defended by Mr. John M. Newnham, solicitor. The purchase of 3 oz. of the spirit on March 23 having been proved, Mr. Edward Hinks, B.Sc., F.I.C., county analyst, proved receiving the sample and produced the following certificate:

Ethyl nitrite, 1.7 by volume.  
Alcohol, 47.0 by volume.  
Aldehydes, acids, etc., a trace.  
Water, 51.3.

The ethyl nitrite, although low, was within permissible limits.

It was added that sweet spirits of nitre of the British Pharmacopoeia contains not less than 87 per cent. volume of alcohol. On this basis the sample showed a deficiency of 40 per cent. of alcohol, and the acidity was greater than that of a good preparation. The defence suggested that in any event the alcohol is only the solvent or preservative, the active principle being the ethyl nitrite. The defendant said he did not sell the preparation himself. It was taken from a remnant which had been put on one side, and was not for sale. It had been diluted with proof, not rectified, spirit, and was only to be used in mixtures for colds. The alcohol is used as a preservative or solvent, the ethyl nitrite being very volatile. Mr. H. Paget Matthews, President of the Croydon Pharmacists' Association, also stated that the ethyl nitrite is the active principle and that the alcohol is used as the preservative or solvent. The analyst explained that the absence of the proper quantity of alcohol and the presence of the water would cause decomposition and deterioration of the ethyl nitrite and impair its action. The Magistrates felt there must be a conviction, and imposed a fine of 1*l.*, and 2*s.* 4*s.* costs.

### County Court Cases.

#### THE HACKNEY PHARMACY.

In the Shoreditch County Court, on April 25, before Judge Smyly, K.C., the application for an administration order by Mr. Altschuler, of the Hackney Pharmacy, 9 Junction Place, Hackney, described as a druggist, brought about by an action by the Standard Tablet & Pill Co., Ltd., Hove, Sussex, was again considered. The application was before the Court on March 30 (*C. & D.*, April 8, index folio 503), when Mr. Altschuler put the administration order application on the file, and also asked that there should be a stay of execution in two cases of distress, which was granted. At the time he said he was not sure that he would go on with the administration order. He returned his debts at 23*l.* 15*s.* 9*d.*, and his assets at 75*l.*, consisting of household effects and medicine bottles and fixtures. The applicant had written to the Court under the previous day's date as follows:

"9 Junction Place, N.E.

"DEAR SIR.—Re my request for an administration order to be heard on April 25, I wish to withdraw same, as I am trying to settle matters another way. Yours truly,

"H. ALTSCHULER."

Judge Smyly said, as would be seen by the applicant's letter, he had decided not to go on with the matter. There was also a letter from a solicitor for one of the creditors. He wrote from Southend-on-Sea as follows:

"DEAR SIR,—As solicitor for and on behalf of Mr. and Mrs. Joseph Carlton, of 14 Seaforth Road, Southend-on-Sea, I hereby give you notice that I shall oppose the application of the above-named debtor Altschuler on the following grounds: (1) the debtor has given an incorrect return of the money due to my clients. He is indebted to them in the sum of 2*l.* 1*s.* 10*d.* in addition to the costs of the action in the Southend County Court, which amount to 4*l.* 0*s.* 6*d.* (2) In addition to his business as a chemist the debtor is an operatic singer, and his earnings may be anything up to 10*l.* a week.

"Yours truly,

"H. B. SNOW."

A creditor appeared to oppose the application for the administration order and said he had had no notice of the withdrawal.

Judge Smyly: Neither has he given us one except this letter yesterday, and you see he has been called twice and does not answer.

The Creditor: Can I have my expenses for attending, then?

Judge Smyly: Oh no! I don't think so; there seems to be no money about.

The Creditor: But he could have let us all know and saved my time and expense.

Judge Smyly: No; I should say it is as well to leave it where it is: the very nature of the application was such as to show that he was not overburdened with money.

An order was accordingly made for the withdrawal of the application. Later in the day another creditor appeared to oppose, and was astonished to hear that it had been called on and disposed of, and left protesting because he was not allowed expenses for waiting about all day.

## DEED OF ARRANGEMENT.

**Dawson, Theophilus Ernest**, 58 High West Street, Gateshead, and 1 Arthur Street, Gateshead, chemist.—Trustee: W. T. Price, Post Office Chambers, St. Nicholas Square, Newcastle-on-Tyne. Dated, April 11; filed, April 19. Secured creditors, 762*l.*; liabilities unsecured, 635*l.*; estimated net assets, 243*l.* Among the creditors are Harkness, Beaumont & Co., Edinburgh (13*l.*).

## BANKRUPTCY REPORT.

**Re James Brown**, 204 North Street, Belfast, Chemist.—At the Belfast local Bankruptcy Court on April 24, this matter came on for audit of assignee's accounts. Mr. E. Cooksey read the report, which showed a balance in hand of 127*l.*, and that preference debts amounting to 50*l.* 15*s.* and the official assignee's remuneration had been paid. He asked his Honour to pass the accounts, subject to the taxation of petitioner's costs, which would be lodged this week. The order was granted.

## LIMITED COMPANIES.

### New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

**PACKHAM & Co. (GLASGOW), LTD. (P.C.)**.—Registered in Edinburgh. Capital 10,000*l.*, in 1*l.* shares. Objects: To purchase the business of Packham & Co., aerated and mineral water manufacturers (in liquidation). The first directors are Dr. McCorkindale, James Menzies, A. B. Stevenson, and Wm. Douglas, jun.

**SCIENTIFIC NUTRIENTS, LTD. (P.C.)**.—Capital 100*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in remedial preparations and patent medicines, etc. The first subscribers are J. Henderson, 41 Coronation Road, Plaistow, clerk, and Brentville, 165 Shaftesbury Avenue, W.C., agent.

**S. MARSHALL & Co., LTD. (P.C.)**.—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business of wholesale and retail chemists, druggists, and dealers in photographic requisites and rubber goods. The first subscribers are W. Goodwin, 12 Lansdowne Grove, Neasden, N.W., clerk, and W. Mitchellson, 48 Windsor Road, Holloway, N., clerk.

**HERCULES FOODS, LTD. (P.C.)**.—Capital 2,000*l.* in 500 ordinary and 15,000 preference shares of 1*l.* each. Objects: To take over the business carried on by F. W. Lait as manufacturer of and dealer in the "Hercules Infant and Invalid Food" and a product called "Diastex" for the improvement of bread and other flour foods. The first directors are F. W. Lait, H. G. Owles, and C. F. Oughton. R.O., Hercules Food Mills, Putney Bridge, Fulham, S.W.

**BARNETT'S PERFUMERY, LTD. (P.C.)**.—Capital 10,000*l.*, in 1*l.* shares. Objects: To take over the business of a manufacturing and export perfumer carried on by H. H. Barnett at 126 and 128 Bristol Street, Birmingham, as "Barnett & Co.," and to adopt agreements (1) between H. H. Barnett, Bessie C. Barnett, J. E. Player, and W. Tyndall, and (2) with J. E. Player and W. Tyndall. The first subscribers and directors are J. E. Player, 28 York Street, Edgbaston, Birmingham, manufacturer, and W. Tyndall, 21 Montague Road, Edgbaston, Birmingham, C.A.

### Company News.

**BENGERS FOOD, LTD.**—The directors have declared a final dividend of 1*s.* 3*d.* per share, making, with the interim dividend, 2*s.* per share for the past year. The carry forward is 4,969*l.*

**NOTTINGHAM SOAP Co., LTD.**—A notice of the appointment of Mr. T. C. Leman, St. Peter's Church Walk, Nottingham, as receiver on April 6, 1911, under powers contained in debentures dated August 22, 1905, has been filed at Somerset House.

**G. H. MORISON & Co., LTD.**—In compulsory liquidation. (*C. & D.*, April 15, index folio 538.) Among the creditors are: British and Foreign Bottle Co. (16*l.*), E. N. Frankenstein & Co. (12*l.*), R. J. Koehlin (631*l.*), G. H. Morison, amount assigned by R. J. Koehlin (3,642*l.*), R. J. Koehlin and G. Herbert Morison (67*l.*), C. Zimmermann & Co. (22*l.*).

**WATFORD MANUFACTURING Co., LTD.**—The report for the year ended February 23 states that the profit on the year's trading is 19,449*l.*, as against 19,192*l.* last year. After paying twelve months' preference dividend, writing 4,000*l.* off investments, placing 2,000*l.* to depreciation reserve account

and paying directors' fees, there remains a balance of 11,172*l.* to be carried forward to the next account.

**BARCLAY & SONS, LTD.**—The fifteenth annual report and balance-sheet to be submitted to the shareholders at the general meeting to be held at 95 Farringdon Street on April 28 states that the profit on the year, including 14*l.* 4*s.* 5*d.* brought forward, is 3,417*l.* 18*s.* 4*d.*, out of which has been paid the interest on debentures and interim dividend on the preference shares, 1,300*l.* 19*s.*, leaving a balance of 2,117*l.* 19*s.* 4*d.*, which the directors recommend should be applied as follows: To provide six months' dividend on 5 per cent. preference shares to December 31, 1910 (652*l.* 1*s.*); one year's dividend at 10*d.* per share (4*l.* per cent.) on ordinary shares to December 31, 1910 (798*l.* 15*s.* 10*d.*); to write off capital expenditure (299*l.* 0*s.* 4*d.*); to carry to reserve (to bring same up to 1,100*l.*) 86*l.* 13*s.* 4*d.*; and to carry forward 280*l.* 8*s.* 10*d.* The retiring director is Mr. Horace Davenport, who, being eligible, offers himself for re-election.

### John Clarke & Co., Ltd.

A meeting of the creditors of this company (in liquidation), which carries on business as wholesale druggists in Corporation Street, Belfast, was held on Thursday, April 20. Mr. Thomas White, who represented several of the largest creditors, occupied the chair, and there was a large attendance. The liquidator (Mr. Robert Walsh) submitted a statement of the affairs of the concern as on April 1, the date of passing the extraordinary resolution to wind up voluntarily. The statement showed gross liabilities as 38,695*l.* 19*s.* 7*d.*, including unsecured creditors 36,023*l.* 1*s.* 6*d.*, the estimated surplus, after meeting the liabilities of the company, subject to realisation and the expenses of liquidation, being 2,960*l.* 12*s.* 8*d.* The assets comprise property valued at 3,995*l.* 10*s.*; cash at bankers and on hand, about 950*l.*; stock-in-trade, at cost, 19,077*l.* 4*s.* 7*d.*; machinery valued at 695*l.* 10*s.*; fixtures, etc., 2,141*l.* 10*s.*; book debts estimated at 21,547*l.* 19*s.*; calls not made on 4,000 shares at 2*l.* per share, estimated to produce 6,630*l.* The estimated total assets amount to 55,050*l.* 5*s.*, less preferential creditors 1,369*l.* 3*s.* 10*d.*; estimated amount available to meet claims of debenture-holders and creditors, 53,681*l.* 1*s.* 2*d.*, less loans and debenture bonds secured on the assets 12,024*l.* 8*s.* 11*d.*, the estimated amount available to meet unsecured creditors, subject to realisation and expenses of liquidation, being 41,656*l.* 12*s.* 3*d.* The meeting passed unanimously a resolution approving and confirming the voluntary winding-up of the company and of the appointment of Mr. Robert Walsh as liquidator. Messrs. Thomas White, Hugh Gordon, Walter Archibald, J.P., and Dr. Geo. Clarke were appointed an advisory committee to consult with the liquidator.

The following are among the trade creditors, but we omit shillings and pence from the amounts due to them:

Brodr. Aarsaether, Aalesund, Norway	25
Alexander, Fergusson & Co., Ltd., Glasgow	115
Allen & Hanburys, Ltd., London	45
Stafford Allen & Sons, Ltd., London	16
Armour & Co., Ltd., London	13
Batger & Co., London	15
Bayer & Co., Ltd., Manchester	28
Dr. Bengue & Co., London	17
Lewis Berger & Sons, London	25
Samuel Berger & Co., London	145
Blyton, Astley & Co., Ltd., Manchester	82
Bovril, Ltd., Dublin	50
Brand & Co., Ltd., London	20
E. Breffitt & Co., Ltd., Normanton	83
Brunner, Mond & Co., Ltd., Northwich	190
Bryce, Son & Co., Manchester	36
Burroughs Wellcome & Co., London	119
H. W. Bush & Co., Ltd., London	46
W. J. Bush & Co., London	22
Butler & Crispe, London	58
Cadbury Bros., Ltd., Birmingham	68
F. C. Calvert & Co., Manchester	10
B. Cannon & Co., Ltd., Lincoln	19
Chesebrough Manufacturing Co., London	24
J. T. Cocking, Plymouth	45
J. & J. Colman, Ltd., London	83
Condy & Mitchell, Ltd., London	31
A. C. Cossor & Son, London	122
A. H. Cox & Co., Ltd., Brighton	85
Day, Son & Hewitt, London	15
Denver Chemical Manufacturing Co., London	15
Dobson, Molle & Co., Ltd., Belfast	17
Domen Belts Co., Ltd., London	41
Electrolytic Alkali Co., Middlewich	209
Ellis, Son & Paramore, Sheffield	63
Eschmann Bros. & Walsh, London	14
Evans Sons Lescher & Webb, Ltd., Liverpool	412
Fassett & Johnson, London	86
T. Ferry & Son, Gateshead-on-Tyne	54
Poster Clarke, Ltd., Maidstone	12

Leon Frenkel, London	18
Fuerst Bros., London	26
C. E. Fulford, Ltd., Leeds	17
Fulford Co., Ltd., London	24
A. Gallenkamp & Co., Ltd., London	12
W. J. Glover & Co., Belfast	33
R. W. Greeff & Co., London	75
Julius Grossmann, Hamburg	49
S. Hanson & Son, London	203
C. R. Harker, Stagg & Morgan, Ltd., London	296
G. W. Harrison, Reading	22
W. & D. Harvest, London	37
Harvey & Co., Dublin	31
J. & J. Haslett, Belfast	28
J. L. Hatrick & Sons, London	20
Paul Hecker & Co., London	22
Howards & Sons, Ltd., Stratford	65
Thos. Hubbuck & Son, Ltd., London	11
Huilerie Nouvelle, Marseilles	58
J. G. Ingram & Son, London	42
Ingram & Royle, Ltd., London	36
International Plasmon, Ltd., London	10
Jackson, Rohrs & Co., Ltd., Derby	12
Jeyes' Sanitary Compounds Co., London	35
Johnson & Jorgensen, London	37
Kaputine Syndicate, Ltd., Manchester	16
Kay Bros., Ltd., Stockport	20
Thos. Keating, London	19
Kirkhams, Ltd., Stoke-on-Trent	14
B. Kuhn & Co., London	12
Lever Bros., Ltd., Dublin	135
Liverpool Lint Co., Liverpool	37
T. Howard Lloyd & Co., Leicester	15
F. London & Co., Ltd., Derby	159
Lumière N. A. Co., London	10
McDougall Bros., Manchester	14
Thos. McMullan & Co., Belfast	42
H. Marks & Sons, London	30
Mav, Roberts & Co., London	17
Mellin's Food, Ltd., London	16
E. Merck, London	19
Midland Vinegar Co., Birmingham	46
Andrew Millar & Co., Ltd., Belfast	286
National Vaccine Institute, Dublin	34
Nestlé and Anglo-Swiss Condensed Milk Co., London	351
North of Ireland Chemical Co., Belfast	68
H. J. Packer & Co., Bristol	10
Parke, Davis & Co., London	54
Thos. Parkinson, Ltd., Preston	118
A. & F. Pears, Ltd., London	40
Michael Pintus & Sommerfeld, London	40
Potter & Clarke, Ltd., London	29
Prestons' Liverpool Distillery Co., Liverpool	85
Raimes & Co., Stockton-on-Tees	19
Raphaels, Ltd., London	12
J. M. Richards & Sons, Ltd., London	25
Robinson & Sons, Ltd., Chesterfield	264
Rowand & Co., Liverpool	22
Royal Baking Powder Co., New York	48
Savory & Moore, Ltd., London	20
T. & H. Smith, Ltd., Edinburgh	257
Spratt's Patent, Ltd., London	19
Suttley & Silverlock, Ltd., London	13
Charles Tennant & Co., Belfast	103
Christopher Thomas & Bros., Ltd., Bristol	18
John Timpson & Co., Ltd., London	36
Thos. Tyrer & Co., Ltd., London	145
Van Horn & Sawtell, London	19
Veno Drug Co., Ltd., Manchester	33
A. J. White, Ltd., London	23
Wilkinson & Simpson, Newcastle-on-Tyne	160
Vincent Wood, London	15
Wright, Layman & Umney, Ltd., London	24
A. Wulff & Co., London	29
York Glass Co., York	64
Young's Paraffin Light and Mineral Oil Co., Ltd., Belfast	105

### Charges or Mortgages.

Under the Companies (Consolidation) Act, 1908, Section 93, the mortgages or charges therein specified are (except in Scotland) void against the liquidator and any creditor of the company unless filed with the Registrar in accordance with the conditions laid down in the Act.

Full statutory particulars of the following have been filed at Somerset House, London, W.C.

*George Mason & Co., Ltd.*—Mortgage on 396 North End Road, Fulham, dated April 7, 1911, to secure all moneys due or to become due from company to London City and Midland Bank, Ltd., stamped to cover 1,000*l.*

## BIRTHS.

**KELSEY.**—At Benoni, Transvaal, South Africa, on March 29, the wife of Walter V. Kelsey, chemist, of a son.

**PATTERSON.**—At 88 Park Road, Dulwich, London, S.E., on April 21, to John W. Patterson, Ph.C., and Mrs. J. W. Patterson (*née* Derrington), Ph.C., a daughter.

**SKINNER.**—At 33 Restalrig Road, Leith, on April 21, the wife of James A. Skinner, chemist, of a daughter.

## MARRIAGES.

**BOYS—BROWN.**—At St. Saviour's Church, Leicester, by the Rev. D. Edwards, M.A., on April 19, Frank Arthur Boys, chemist and druggist, St. James' Road, Croydon, to Edith Ellen, eldest daughter of Mr. E. Brown, Charnwood Street, Leicester.

**GRINDLEY—CASE.**—At the Church of St. Paul, Glenageary, Kingstown, on April 19, by the Rev. Edmund Robinson, M.A., George Howel Grindley, son of the late Mr. George Grindley, Ph.C., Treasurer of the Pharmaceutical Society of Ireland, to Kathleen Elizabeth, eldest daughter of Mr. Jacob Case.

**HALSTEAD—HALL.**—At Sale Presbyterian Church, on April 18, by the Rev. F. Harvey, B.A., assisted by the Rev. J. Grimshaw (cousin of the bridegroom), Harold B. Halstead, chemist and druggist, The Pharmacy, Roker, Sunderland, twin son of Mr. Henry Halstead, chemist, Rawtenstall, to Agnes Elizabeth (Lizzie), daughter of Mr. James Hall, Sale, Manchester.

**MABEN—WALTER.**—At the Wesleyan Church, New Ferry, Cheshire, on April 13, by the Rev. H. J. Blasdale, William Adamson, eldest son of Mr. Thomas Maben, F.R.S.M., London, to Ada, younger daughter of Mr. Charles Walter, The Pines, Lower Bebington.

**MCLEOD—HOGGEN.**—At St. Paul's, London, S.E., on April 13, by the Rev. Cyril Bradley Hodson, W. Alexander McLeod, chemist and druggist, eldest son of Mr. A. McLeod, Thornaby-on-Tees, to Mildred (Bessie), younger daughter of Mr. R. Hogben, of Herne Hill, and of Hogben's Hill, Selling, Kent.

**THOMPSON—STEPHENS.**—At St. Matthias' Church, Plymouth, by the Rev. Barrington Woodman, on April 17, Charles Vernon, eldest son of Mr. Charles Thompson, Ph.C., Sparkbrook, Birmingham, to Mabel, youngest daughter of Mr. Thomas Robert Stephens, of Penzance.

**TIMBS—MASON.**—At St. Leonard's, Chesham Bois, Bucks, by the Rev. T. H. Fitzpatrick, M.A., Rector of the parish, on April 19, Percy Alexander Timbs, of Highgate and "Weaver's Hall," 22 Basinghall Street, E.C., to Margery Baskerville Mason, younger daughter of the late Mr. Alfred Henry Mason, F.C.S., latterly manager to Seabury & Johnson, New York, and chairman of the New York section of the Society of Chemical Industry.

## DEATHS.

**CADGE.**—At Bingham, Notts, on April 24, after two years' suffering from cancer, Florence, the wife of Mr. C. C. H. Cadge, chemist and druggist.

**MCCONNELL.**—At Beverley, on April 23, Mr. Alan McConnell, chemist and druggist, aged fifty-five. Mr. McConnell was manager for Mr. T. H. Gabbetis, chemist, Toll Gavel, Beverley, until 1908, when he started in business on his own account at Sutton, Cambs.

**MERRICK.**—At Hereford, recently, Mr. James Merrick, aged eighty-eight. Mr. Merrick had acted for many years as dispenser to various medical practitioners in Hereford.

**WINCKLER.**—On April 25, in Germany, Mr. Jacob Winckler, head of the firm of Messrs. Winckler & Co., Japanese importers and exporters, of Hamburg, London, and Yokohama, aged about sixty.

## WESTMINSTER WISDOM.

### The Week in Parliament.

#### YELLOW PHOSPHORUS.

The Under-Secretary of State for India has informed Viscount Wolmer, M.P., that it is not anticipated that the Bill to prohibit in India the manufacture, sale, and importation of matches, in the making of which yellow phosphorus has been employed, could be introduced until the Legislative Council assembled in Calcutta at the end of the year.

#### SICKNESS ASSURANCE.

The introduction of the Invalidity, Sickness and Unemployment Assurance Bill by the Chancellor of the Exchequer, which had been arranged for next Monday, has been again postponed to a date not yet fixed. It will require a full day of debate on the motion for the first reading, and it is now possible that that day will not come until after the Parliament Bill has been sent to the House of Lords in the third week of May.

#### ELEMENTARY SCHOOLS (INSTRUCTION IN HYGIENE.)

An amended copy of Dr. Addison's Bill to require that in Public Elementary Schools instruction shall be given in hygiene and to girls in the care and feeding of infants has been issued. The operative clause of the Bill, which is not to come in force (if it pass) until 1913, is as follows:

Each local education authority shall arrange that during each school term simple instruction in hygiene and the care of health suitable to the age and understanding of the children shall be given to all children attending public elementary schools, and, in particular, shall arrange that each girl of the age of twelve years or more shall be adequately instructed in the care and feeding of infants.

#### THE STRIKE AT MESSRS. IDRIS'S.

The President of the Board of Trade having been asked by Mr. George Lansbury, M.P., whether he was aware that over 100 girls and women are on strike at Messrs. Idris and Company, mineral-water manufacturers, on account of the president of their union, who has been 13 years in the service of the firm, being dismissed for being three minutes late in reaching work, and whether his department will take action to investigate and report upon the facts of the dispute, Mr. Buxton replied on Friday, April 21, that his attention had been called to the dispute, and that he was then in communication with the parties with a view to the holding of a conference to consider the question. [This conference was held on Monday, April 24, and an amicable settlement was come to. See English News.]

#### "MADE IN GERMANY."

The President of the Board of Trade was asked by Mr. R. Hunt, M.P., in the House of Commons on Tuesday, April 25, whether he was aware that German manufacturers, in recommending their goods to merchants in this country, state that it is not necessary to have their goods marked "Made in Germany"; and whether he would cause inquiries to be made and put a stop to any practices of this kind.

The President said he had no official information as to the practice referred to. If the hon. member would supply him with information as to specific cases, the Board of Trade would be in a position to consider whether the alleged statements did or did not suggest an evasion of the Merchandise Marks Act. No doubt the hon. member was aware that the Act does not require imported goods in all cases to be marked with their country of origin.

#### WHOLESALE DEALERS' SPIRIT LICENCES.

The Chancellor of the Exchequer has privately informed Mr. Grettton that No. 1 of the "Provisions applicable to Wholesale Dealers' Licences," in the First Schedule of the Finance (1909-10) Act, 1910, provides that a dealer in spirits may not under that licence sell spirits in any less quantity than two gallons or one dozen reputed quart bottles. This provision merely defines the quantity which may be sold, but does not alter or affect the provision in Section 102 of the Spirits Act, 1880, which restricts the sale by a dealer (unless he also holds a licence enabling

him to sell spirits by retail) to a minimum quantity of two gallons of the same denomination at one time for the same person. There is not any distinct statement in the Spirits Act, 1880, in reference to the term "denomination," but the different descriptions of British spirits referred to in the Act are given in the definition section (Section 3) as plain spirits, compounds, and spirits of wine. The different denominations of foreign spirits are shown in full detail in the Customs tariff, but for the purposes of this question the denominations of potable foreign spirits may be taken to be brandy, rum, geneva, liqueurs, and "unenumerated" spirits.

#### THE SHOPS BILL.

The Shops Bill came before Grand Committee on Thursday, April 27, under the chairmanship of Mr. J. W. Wilson, M.P.

Mr. Glyn-Jones, M.P., proposes to move the following new clause as to the closing of shops:

(1) No shop shall, save as otherwise provided by this Act, be open for the serving of customers for more than seventy hours in any week. (2) The occupier of a shop shall fix, within the limits allowed by this section, and shall specify in a notice in the prescribed form, which must be served upon the local authority, the hours during which the shop is open for the serving of customers, and he shall continuously exhibit in a conspicuous place outside the shop a copy of the said notice.

Mr. Glyn-Jones, in conversation with our Parliamentary representative, said that his clause, if adopted, would create a revolution in the existing practice. His proposal is that it should be left to the shopkeeper to decide how the seventy hours should be allocated.

In order to have the proposal considered, Mr. Glyn-Jones will move postponement of consideration of Clauses 1, 2 and 3. If that is not agreed to he will move on Clause 1 that certain words shall be inserted in the clause, which words are shown in italics in the reprint of the clause which is subjoined:

(1) A shop-assistant *employed about the business of a shop which is required by the provisions of this Act, or by any closing-order made thereunder, to be closed for the serving of customers during any week-day* shall not, save as otherwise provided by this Act, be employed about the business of a shop for more than sixty hours (exclusive of meal-times) in any week, and on one week-day in the week he shall not be employed after 2 o'clock in the afternoon.

(2) Intervals for meals shall be allowed to each shop-assistant in accordance with the first schedule to this Act.

(3) The occupier of a shop shall fix, within the limits allowed by this section, and shall specify in a notice in the prescribed form, which must be affixed in the shop, *which is required by the provisions of this Act, or by any closing-order made thereunder, to be closed for the serving of customers during any week-day*—

(a) the times at which the employment, and

(b) where the employment is divided into spells, the times at which the several spells are to commence and end on the several days of the week, and may fix different times for different shop-assistants, etc.

The second interpolation follows the order paper, but it is subject to revision, as the honourable member informs us; in fact, all the proposals are tentative and are designed to make the measure more workable in practice.

#### EVENING CLASSES AND WORKING HOURS.

In the House of Commons on Monday, April 24, Mr. Glyn-Jones asked the President of the Board of Education whether his attention has been called to the fact that of 1,344 students attending the Tottenham Polytechnic and evening continuation classes, 312 work at their employment between 50 and 55 hours, 113 between 55 and 60, 39 between 60 and 65, 22 between 65 and 70, and eight between 70 and 75 hours per week; and that, of the 1,344 students, 316 do not reach their homes before 7.30, 124 before 8, and 61 before 8.30; whether he can state if these conditions are general throughout the country; and whether he proposes to introduce legislation for the provision of continuative education which will place no strain upon the mental or physical powers of young people. —Mr. Runciman replied that the particular facts with regard to the students in the technical and evening schools at Tottenham were first brought to his attention by his

hon. friend. He thought it might be taken for granted that similar conditions prevailed in many parts of the country, with the exception that the distance between the homes of the students and the places where they are employed are probably greater in London and its neighbourhood than in most provincial towns. The question how best to secure opportunities for such instruction under conditions which may render it effective without imposing a strain upon the pupils, thereby rendering it more harmful than beneficial, was at the present time engaging his attention.—On the same day Mr. Glyn-Jones asked the Chancellor of the Exchequer a question in regard to the compensation to be paid in respect of the American Stores beerhouse, Stepney.

#### TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," April 12, 1911.)

"BONHAVIN": for a beef-and-malt wine (42). By Liebig's Wine Co., 116A Islington, Liverpool. 331,531.

"ZYMOL": for all goods (48). By Zymol Co., 11 Marina, High Street, Heme Bay. 330,618.

"DALMERE": for hair-preparations (48). By M. Winnett, 25 Derbyshire Lane, Stretford, near Manchester. 330,655.

Device of two brooms crossed; for soaps (47 and 48) By New Hydroleine Co., Ltd., Castle Soap Works, Ashby-de-la-Zouch. 331,169.

Device of sword; for shaving-brushes, etc. (50). By Dexter & Birkmann, Roritzerstrasse 28, Nuremberg. 329,374.

(From the "Trade-marks Journal," April 19, 1911.)

"EUFORMINTA" and "LACTALBON" for all goods (3 and 42). By A. Wulff & Co., 12 Chenies Street, London, W.C. 329,335, 329,779.

"ST. LUKE": for medicinal chemicals (3). By J. J. McBeth, British Dispensary, New Road, Bangkok, Siam. 330,858.

"ATOPHAN": for medicinal chemicals (3). By Chemische Fabrik E. Schering, 170-171 Mullerstrasse, Berlin. 331,473.

"FRULAX": for medicine (3). By Frizell & Co., 1 Cranbourne Street, London, W.C. 331,754.

Picture of Eve; for surgical instruments, etc. (11), and for indiarubber goods (40). X L Rubber Co., Viaduct Road, Altrincham. 330,443/4.

"THE MASTER'S": for food substances (42). By Reade Bros. & Co., Ltd., Cleveland Road, Wolverhampton. 330,653.

"A S A (disclaimed), and flower design; for non-toxic coffee (42). By Société Anonyme Atoxicafé, Villa la Romaine, Route de Blonay, Clarens-Montreux. 331,207.

"RABBO": for a food for rabbits, etc. (42). By R. Hyde & Co., Ltd., 54 Lilford Road, Camberwell, London, S.E. 331,668.

"KAYMAC": for all goods (44). By John Mackay & Co., Ltd., 4-12 Canning Street, Edinburgh. 328,255.

(From the "Trade-marks Journal," April 26, 1911.)

Foreign characters and label design of two shields bearing four horses; for all goods (1, 3, and 4). By Badische Anilin & Soda Fabrik, Ludwigshafen-on-Rhine. 331,133/34.

"PRESTO": for an insect-repelling preparation (2). By Patent Borax Co., Ltd., 194-196, Ledsam Street, Ladywood, Birmingham. 331,638.

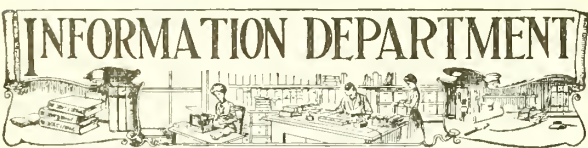
"IGNIC": for disinfectants (2). By Pinerlin Co., 15 Victoria Park, Fishponds, Bristol. 332,199.

"KOLA-DULTZ" for medicinal chemicals (3). By A. Haering, 29/30 Schlesischestrasse, Berlin. 329,889.

"GELODURAT" for medicinal chemicals (3). By O. Eisen-garten, 21 Schönbaum, near Danzig. 330,982.

"SYRGOSOL": for all goods (3). By B. Siegfried, In den Bruhlen, 830-1,000 Zofingen, Canton of Argovie, Switzerland. 331,886.

"NUVICO": for dried-milk preparations (42). By Fanny Spurin, 17 Brunswick Road, Norwich. 329,231.



Postal Address:

C. &amp; D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.

Telephone Address: "CHEMICUS LONDON."

Telephone No.: BANK 842 (two lines).

**INFORMATION WANTED.**

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

- 5/7. "Vigorase": makers.  
 13/22. "Oseton": suppliers.  
 20/56. "Salivoids": makers.  
 12/58. Sanford's library paste.  
 14/33. "Neodora" specialties.  
 244/63. "Javine" face-powder.  
 18/67. Lloyd's "Indian Earth."  
 18/670. John Taylor's bath salt.  
 255/13. "Sanalaptine": a food.  
 6/66. "Gimneis" brand olive oil.  
 13/4. "Rat-Tail" celluloid truss.  
 16/38. "Whitten's Embrocation."  
 6/35. "Family" nasal insufflator.  
 244/64. "Knowlton's Yeast Food."  
 254/1. "Korrektio" instep support.  
 19/31. Wilson's Neuropathic Drops.  
 15/52. "A.B." pessaries: suppliers.  
 257/27. "Super-oxide" tooth-paste.  
 243/72. "Vienna Food Co.": address.  
 18/42. Lyette's face-powder and lotion.  
 14/39. Chevalier Martel's hair-restorer.  
 18/671. "Karpetine," for cleaning carpets.  
 13/22. "Gonoton": who makes or supplies?  
 15/2. "Galvanophor," A. V. T. & Co.: makers.  
 247/65. "Zyncopyline": makers or suppliers.  
 247/24. "Sue de Gardonia": agents in London.  
 15/46. Ashworth linen toilet glove: proprietors.  
 15/460. "Uctrol Pir's": maker or London agent.  
 249/24. "Zenara & Cie, London and Paris": address.  
 246/7. "Omnicura" (Braggi's): actual makers or wholesale suppliers.  
 19/28. "X. L." (registered) silkline sanitary toilet-paper: suppliers.  
 20/12. "Dr. Parry's Savony (a liquid soap), London and New York": address.  
 19/27. Suppliers of machine for automatically burning at intervals asthma-powder or asthma-paper.

**INFORMATION SUPPLIED.**

During the past week we have answered inquiries as to where the following articles can be obtained, and in many cases we have given the actual makers. The information will be repeated to any other inquirers who send to this Department a stamped and addressed envelope for the purpose.

- Abbott Alkaloidal Co.'s preparations (21/14).  
 Alfredum's Egyptian henna (20/54).  
 Anti-incerustation discs for kettles (19/41).  
 Aphrodine-tablets (makers and London agents (12/13).  
 "Arak" toilet articles (13/2).  
 "Argentina" specialties (18/671).  
 Artificial noses (11/15).  
 Asafetida importers (Indian Government inquiry) (16/9).  
 "Autan" disinfectant (13/23 and 15/43).  
 Ayer's sarsaparilla (9/13).  
 Barry's pearl cream (18/43).  
 "Bird of Birmingham" (16/27).  
 British Syphon Co., Ltd. (18/14).  
 Camphylene-balls (22/22).  
 "Carbolineum" disinfectant (22/21).  
 Cardboard articles for window display (15/13).  
 Casein and glycerophosphates (19/67).  
 Cascin (14/17).  
 Castor-lax (15/45).  
 Coronation ware (china and enamel) (21/34).  
 "Curosol" socks (12/3).  
 Cyanides for export (14/13).  
 "Daisy" fly-killer (14/33).  
 "Diastafor" (15/35).  
 Dermol soap (18/672).  
 Ellen's "Crème Char-mante" (14/39).  
 "Esanofele" (for malaria) (15/46).  
 Felt manufacturers (13/73).  
 Galvanophors (17/49).  
 Guy's tonic (9/130).  
 Harlan's, Dr., beauty mas-sage-cups (12/67).  
 Heath's surgical instruments (21/140).  
 "Horse-Shoe" brand soap (13/60).  
 Keetch (brush-maker) (20/60).  
 Kieselguhr (first-hand supplies (21/40).  
 "Killarney" perfume (19/35).  
 "Kkovah" specialties (12/59).  
 Kond's (Dr.) bile-pips (12/63).

- "Kozie" caps (9/69).  
 Labeller of shop-rounds (12/8).  
 Lævo-Suprarenin (synthetic) (19/-14).  
 Lannelongue's serum (254/13).  
 Lucerne Pharmacie (English specialties) (20/59).  
 Luken's sterile catgut (17/15 and 18/33).  
 Marietta Stanley & Co. (8/300).  
 "Massoline" skin-food (18/670).  
 Metal fittings for bottles (19/42).  
 Mother Seigel's syrup and pills (9/131).  
 Moulds for compressing soaps (12/10).  
 "Neurovil" (18/67).  
 Nitric acid, commercial (50-case lots) (13/3).  
 "Norla" (15/54).  
 "Normyl" treatment (18/66).  
 Nut-food (7/64).  
 Oswald's preparations (12/63).  
 "Pal-Ama" (15/48).  
 "Papier Senyol" (corn-cure) (18/673).  
 Para-amido-benzoyldiethyl-amino-ethanol hydro-chloride (19/140).  
 Pasteur Vaccine Co.'s products (12/69).  
 "Phenyle" makers (French inquiry) (10/52).  
 Pyroligneous acid (17/34).  
 "Quick White" polish (19/23).  
 Rackham's animal medicines (14/37).  
 "Roseine" crystals (20/49).  
 "Salvarsan" (606) (18/30 and 18/63).  
 "Satine" toilet-rolls (18/23).  
 "Sempere Giovine" cream (8/30).  
 Sesame oil (17/71).  
 Shellac (12/100).  
 Soda tannate (for boiler incrustation (18/29).  
 "Soderseine" (15/45).  
 Sulphuric acid, commercial (50-case lots) (13/300).  
 Thionol (19/29).  
 "Tiodine" (18/42).  
 Toilet-paper (19/9).  
 Tooth-powder tins, decorated (15/23).  
 Turned-wood boxes (19/53).  
 "York" soothers (9/74).  
 "Zoelia" bath salts (8/13).  
 "Zool" (for veterinary use) (12/691).  
 "Zymole" tooth-powder (15/57).

**APPRECIATIONS.**

The following are selected from letters received in reply to information given during the past week:

- From a retail pharmacist. 'Thank you so much for all the trouble taken to trace maker of special brand of formalin-lozenges.' (15/15.)  
 From an importer of crude drugs, etc. 'Many thanks for your kind favour of the 25th inst. We think the matter should be very interesting to us.' (21/19.)  
 From a firm of toilet-paper manufacturers. 'We thank you for your inquiry of yesterday's date, which we have forwarded to the works for attention.' (21/36.)  
 From a foreign representative of a wholesale drug-house. 'I have to thank you for the reply received this morning re cyanide, and appreciate very much your promptness and courtesy.' (16/44.)  
 From a firm of manufacturers of pharmaceutical machinery. 'I am greatly obliged to you for bringing my name before the — Manufacturing Co., of —, and hope that business will result.' (15/20.)  
 From a firm of chemical manufacturers. 'We are much obliged to you for yours of the 20th inst., and are giving attention to the inquiries you have been good enough to pass to us.' (16/33.)  
 From a firm of wholesale dealers in veterinary preparations. 'We thank you very much for your letter of yesterday's date, the contents of which are duly noted. We have been approached by both the houses you name.' (15/30.)  
 From a company of syphon-makers. 'We thank you for your letter of yesterday's date, giving us the name of Mr. —, of —. We are taking the matter up, and trust business will result.' (21/30.)  
 From a firm of manufacturers of electrical appliances. 'We beg to thank you for your letter of the 24th inst., in which you inform us that you have referred to us. We shall no doubt be able to supply him with what he requires.' (21/17.)  
 From a firm of manufacturers of pharmaceutical and bacteriological specialties. 'Thanks for information given and all the trouble taken in respect of Lannelongue's serum. It is satisfactory to have the information direct from the source of supply.' (19/59.)  
 From a firm of East India merchants and exporters. 'We are in receipt of your esteemed favour of the 20th inst. supplying us with the name of the London agents for Peacock's bromides, for which we are greatly obliged.' (16/66.)  
 From a firm of manufacturers of food products. 'We are greatly obliged to you for your favour of the 21st inst., in which you state that you have referred Messrs. — & Co. to us. Your letter will do us good, and we greatly appreciate it.' (17/46.)

## OBSERVATIONS & REFLECTIONS.

By Xrayser II.

### The Account of Usquebagh

given in Mr. Wootton's "Chronicles of Pharmacy," and quoted by you last week, is not quite correct. Neither the name nor the formula made its first and only official appearance in the P.L. of 1677. They both occur in the first edition (1618), in the third (1627), and, I presume, in the intermediate one. Culpeper retained them in his "Dispensatory" of 1654, but they were not included in the official Pharmacopœia of 1650. In the early editions this preparation was indexed as "Aqua Vsquebach," but "Usquebach" alone was the name given to it in the body of the works. In 1677 the formula was again included, this time under the name "Vsquebach, sive Aqua Vitæ Hybernorum," but it is impossible to accept this as the popular Irish drink of which Howell, in his "Letters" (1641), says that nowhere but in Ireland can usquebagh be had in perfection, and adds that there it is not drunk, as with us, in "acqua-vitæ measures," but "goes down by beer glassfulls, as more natural to the Nation." It is only in a very loose way that we can regard "aqua vitæ" as a synonym for "usquebagh." Our early Pharmacopœias have both a simple and a compound aqua vitæ, in addition to usquebagh; there are three non-official usquebaghs in the Arcana Fairfaxiana, all of which, like the official one itself, were made with aqua vitæ, and it is quite possible that in some of them, if not in all, "aqua vitæ" meant brandy, as it does in Rennie's "Conspectus," in which still another form for usquebagh is given which differs widely from all the others that I have seen, saffron being, after brandy, its principal ingredient. As in all the Pharmacopœias in which the name occurs the formula is the same as the one you quote, there can be no doubt that this should be dispensed when usquebagh is ordered in a medical prescription. Neither aqua vitæ nor usquebagh appears in the Pharmacopœia after 1677; with brandy well established as a "steady drink" there was no need of them. Tinct. Card. Co. does not appear until 1746.

### "The People's Doctor"

case reported in your issue last week as having been before the Paris Law Courts, might often be paralleled in this country were it not for the care exercised by the chemist when he is asked to make up prescriptions copied from the medical columns of those newspapers which cater for business by supplying their subscribers with medical advice. When I read the extraordinary mistakes made in printing the prescriptions (?) I am amazed that we in this country do not hear of fatalities arising from this cause. I cannot think that the men who compile the columns are utterly ignorant, for surely no newspaper that has any respect for its reputation would condescend to employ quacks as medical editors, and probably the errors are introduced in the setting or in the proof-reading. But whoever is to blame it is quite likely that an accident will happen some day, and the publisher of the newspaper will probably be sorry that he had not sooner realised his responsibilities.

### The Sale of Emmenagogues

is the one department of the drug business that the majority of chemists are least desirous of being identified with. The prosecution of the Australian chemist mentioned in your last issue was apparently unwarranted, and I am glad that my brother pill-roller got the benefit of the doubt. But I cannot help

thinking that there is too great laxity allowed in the distribution of this class of preparations. The Scotch County Councillors want the formula on the label of all secret remedies, and it seems that they must wait some time before they get it; in the meantime let us make it compulsory that emmenagogues should only be sold on a doctor's prescription, and that every such prescription should be registered in the usual way. The way in which certain "remedies" are advertised in the baser sort of newspaper is disgraceful, and I would be prepared to assent to the adoption of the most stringent regulations regarding the advertisement and sale of these noxious drugs.

### Rubidium Iodide

strikes me as being just about "the limit" as a test for the accuracy of dispensing. Had I been confronted with "rub. iodi" on a prescription the very last drug I would have thought of would have been Rubidium iodide! The test prescriptions which you quote from the "American Druggist" could not have been better chosen if they had been intended to defeat the object which the "New York World" had in view, and in one sense this is satisfactory, for the campaign to prove that druggists as a class were inaccurate or careless dispensers or wilfully fraudulent, was unworthy to start with. True, there are black sheep in every flock, but I am convinced that a general campaign of this kind was bound to fail, for there is not in any community a more honourable class of men, nor men with a keener sense of commercial morality than chemists, and this generalisation is applicable to the United States quite as much as it is to this country.

### The Celebration of the Tercentenary

of the Authorised English Version of the Bible has naturally called attention to peculiarities of translation in some of the older versions. Among these there are two which have some pharmaceutical interest. In several of our older translations the opening clause of Jer. viii. 22, reads—"Is there no treacle in Gilead?" and in one of them, the Roman Catholic English version printed at Douay by Laurence Kellam, in 1609-10, the word "rosin" is substituted for "treacle," a rendering which follows the Septuagint and Vulgate (this version was made directly from the Vulgate), and is probably nearest to the original Hebrew of all our English renderings. Both the A.V. and the R.V. have "Is there no balm in Gilead?" a reading we owe to Coverdale, who, rightly understanding some medicinal substance to be meant, used a word carrying that sense, and one also, it may be added, which shows the fine feeling for verbal felicities which gives his version of the Psalms (our present Prayer Book version) its unique charm. No other reading can compare with "balm" from the purely literary point of view, but it is almost certainly a wrong translation. What the substance referred to was is not known; scholars are, however, virtually agreed that it is neither the "balm of Gilead" of commerce nor the *rakkum* substituted for it in some parts of the East. As already said, the Hebrew word for it (*tsori*) is translated "resin" in the Septuagint, and "rosin" is the marginal reading of the corresponding passage in Ezekiel xxvii. 17 in the A.V., while "mastic" is the marginal reading for the same word in Gen. xxxvii. 25 in the R.V. The latest expert opinion appears to be that mastic, or perhaps the resins of the mastic bush, the terebinth, and the Aleppo pine indifferently (all of which were produced abundantly in the district known as Gilead) should be understood. Arab usage is said to favour mastic, but all these resins were largely used in ancient medicine. Whatever the fact may be the persistence of the reading first introduced by Coverdale is noteworthy as evidence of the value of words: "resin of Gilead," or "treacle of Gilead," would have had no chance as proprietary titles against "balm of Gilead"; the rose by any other name does *not* smell as sweet.

# SANITAS

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page xlix of this issue.

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## Editorial Articles.

### Sickness Insurance.

THERE has been much speculation in the newspapers and  
elsewhere in regard to the nature of the Government Bill  
for dealing with insurance against sickness, invalidity,  
and unemployment, which is expected to be introduced  
by the Chancellor of the Exchequer in the House of

Commons next week unless something unforeseen happens to prevent it (see Westminster Wisdom). It is understood that the Bill is based on the contributory principle, the insurance funds being provided by joint contributions from employers, employed, and the State. It is expected that that part of the scheme which relates to sickness and invalidity will be of general application and compulsory on all employes below a certain level of annual income, but as yet no definite information has been elicited as to whether or not sickness insurance will include medical attendance. It is, however, assumed that Mr. Lloyd George's study of the German system has inspired his proposals, to what extent will be known shortly. That system, so far as medical treatment is concerned, cannot be unknown to our readers, for we have had frequent occasion to report pharmaceutical troubles arising from the sick clubs which are allied to it. The conditions in German pharmacy are different in principle from those in British pharmacy, but any national scheme which touches upon the supply of medicines to the sick is of as direct consequence to the British pharmacist (without monopoly) as it is to the German apotheker, to whom the dispensing of prescriptions and the sale of medicines is reserved by law. The time is ripe, therefore, to give

#### Resume of the German System

which has been in force for thirty years or so. The scheme is divided into three distinct branches: (1) Insurance against sickness, (2) insurance against accidents, (3) Invalidity and old-age insurance. The second, the insurance against accidents, can be dismissed in a few words, as it is here of minor interest. This insurance embraces only those workmen engaged in what are regarded as dangerous trades—viz., quarries, factories, building, dockyards, shipping, butchers, factories in which steam is used as a motive power, etc. All earning less than 100*l.* a year, with the sole exception of foremen earning 150*l.*, are included in this insurance, only the men do not pay any contributions; these are paid solely by the proprietors or employers. All the large branches of industry are classed to different sections, and each section embraces all the works or factories of that special kind; for instance, all the chemical works form one section, the tobacco manufacturers another, and so on. Each section manages its own affairs; the levies are raised from the individual manufacturers in accordance with the degree of danger of their work, the number and pay of their employes. It completes the insurance against sickness and the old-age pension in the following manner, under due consideration of the fact that the man is engaged in an occupation offering greater danger to life than those not included in its benefits. If the man meets with an accident in the works, the insurance against sickness first operates automatically, and on reaching its limit, if the man is incapacitated, he receives a pension which ranges according to the degree of his helplessness; in ordinary cases this amounts to two-thirds of his last yearly salary; if he is utterly helpless it requires assistance, his former full pay is continued. In case of death a burial indemnity of one-fifteenth of his annual salary (at least 2*l.* 10*s.*) is immediately paid out, and his widow receives a pension amounting to a fifth of his annual pay. If she marries again she receives a cash and final payment amounting to 60 per cent. of her late husband's annual pay. Twenty per cent. of his salary is also paid out for every child up to the age of sixteen (but not more than 60 per cent. in all). These pensions are not only paid out to the widow, but in certain cases to other

members of his family who were dependent upon him for their livelihood.

#### Insurance against Sickness.

Every person working for a wage which does not exceed 100*l.* annually is compelled to be insured against sickness, regardless of age or sex. The sole exceptions are soldiers, officials in Government or municipal employ (for whom other provisions have been made), and pharmaceutical apprentices and assistants. Persons who do not come within the scope of the compulsory insurance, such as small shopkeepers, independent artisans, etc., whose income does not exceed 100*l.* a year, may voluntarily insure themselves. The organisation of this scheme consists in the formation of separate sick clubs. Thus, every municipality or self-governing village possesses a sick club, which in smaller places include all persons liable to insurance against sickness. In larger places the members of each trade or occupation are required to form a separate sick club, provided that they number at least one hundred. All sick clubs are subject to Government control, but beyond complying with the regulations, they are self-governing. Thus every sick club elects its board of managers, of which not more than one-third are representatives of the employers, the rest of the workmen—i.e., employes. In addition to these local clubs there exist a large number of sick clubs, which operate throughout the whole of the empire, and embrace members of certain occupations; for instance, bootmakers, carpenters, brewers, etc. These are, from the British point of view, rather interesting, as several of them existed as "friendly societies," such as those which are now so numerous in England, before the compulsory scheme was introduced in 1883. They are obliged to grant their members at least the same benefits as derived from the membership of a compulsory sick club, as above described. In addition to these two kinds of clubs, the employes of a single factory or other establishment employing over fifty hands may form their own sick clubs. The contributions have to be levied by the employer, who has to report the admission of a new hand within three days. The employer pays one-third of the contribution and the employe the remaining two-thirds, which are deducted from his pay. The contribution may not exceed 4 per cent. of the salary of the insured person. To take an actual case. A factory sick club levies 3½ per cent.: a man earning thirty shillings a week pays two-thirds of the total contribution (1*s.* 1½*d.*), or ninepence, his employer the remaining one-third, or 4½*d.*, weekly. Out of the sick-club funds the whole cost of working has to be defrayed, and in addition each sick club must possess a reserve fund amounting to an average year's expenditure, based on the mean expenditure of the preceding three years. If the sick club is not able to pay its way, it is either merged into another one, or the municipality, or employers, are called upon to advance as a loan a sufficient sum to enable it to pay its way.

#### Advantages to Members of a Sick Club.

If a man falls ill he receives free medical attendance and free supply of medicines prescribed by his doctor for a period of twenty-six weeks. The sick club has to pay for any appliances he may require to assist his recovery; in addition, special treatment of any kind, including in some cases a sojourn at any one of the well-known health resorts free of charge, if the doctor thinks it imperative. It will be seen that nothing is debarred in the treatment of a member of a sick club. Indeed, they often fare better in this respect than people not compelled to be insured, but who are unable to meet the expenses incurred in undergoing special treatment. During

his illness the patient may either be treated in a hospital, or, if his case permits, he may remain at home. In the latter case, in addition to the free medical treatment, etc., he is entitled to sick pay amounting to not more than half his usual daily pay. If an employé is treated in a hospital, those dependent upon his wage for their livelihood receive for their maintenance one half of the amount which the wage-earner would be receiving as sick pay were he treated in his own home. Sick pay is paid from the third day of illness. Female members are entitled to full sick pay for a period of six weeks following childbirth. In the case of death of a member, a grant for burial amounting to twenty times his average daily pay is paid out. It must be borne in mind, however, that the above benefits represent the legal minimum which the sick clubs are required to grant their members. Numerous clubs in a flourishing financial condition do considerably more, not only that the contributions levied are smaller, but the sick pay they grant is higher, or they are able to offer other advantages. If at the end of twenty-six weeks from the beginning of the member's illness he is still incapacitated for work, the invalidity and old-age pension becomes operative. Into particulars of this it is not necessary for us to enter.

#### The Medical Aspect.

Usually a sick club makes arrangements with a number of medical practitioners to attend members, the latter going to any one of the contracting doctors. The basis of remuneration is usually the number of members, the doctor receiving a sum varying between three and six shillings annually for each member. For this he attends to the medical wants of those members who make use of his services. Other systems include paying out the whole amount to the local medical association, which undertakes its division, or the amount is divided according to the nature of the work accomplished by each medical man. It must be remembered that the several German States possess an official scale of charges for medical work, each medical or surgical item has a fixed charge in the tariff, and in the case of disputes between doctor and patient, the charges of this tariff become effective, unless a special arrangement has been concluded between both parties. In some cases the sick clubs arrange to pay the doctor in accordance with this tariff, deducting 10 to 20 per cent. rebate. It may be noted that the latter arrangement, without the rebate, is the aim of sick-club doctors, and in many places relations are very strained between the doctors and certain sick clubs. The following are a few of the items enumerated in the Prussian medical tariff:

Opening a superficial abscess	...	...	2s. to 10s.
Plugging the nose	...	...	2s. ,, 5s.
Sight-testing	...	...	3s. ,, 15s.
Assistance at a normal birth	...	...	10s. ,, 40s.
Operations on the internal organs in the abdominal cavity	...	...	50s. ,, 500s.
First visit of the doctor to the patient	...	...	2s. ,, 20s.
Every further visit during the same illness	...	...	1s. ,, 10s.

#### Supply of Medicines.

In Germany and other countries which have adopted compulsory insurance against sickness, the pharmacist is the only person permitted to dispense and sell remedies. It naturally follows that all medical men must write out a prescription for their sick-club patients, and this prescription must be made up in a pharmacy. In these countries there is a Government medical tariff for prescriptions, according to which every prescription is charged, and no difference is made in the charge for rich or poor. The sick clubs strive to reduce their expenditure for medical attendance and for medicines to a minimum, in order to extend the benefits of the insurance scheme to

the wives and children of their members, and to increase the sick pay and other similar measures. It naturally follows that the management of the sick club tries to cut down the expenses for medicines. This is done mainly by forbidding the doctors to prescribe expensive drugs without the consent of the board, by the elaboration of formulæ which utilise each position to the utmost, and thus avoid the loss of a farthing which might otherwise be charged. Other methods resorted to consist in making the doctor prescribe the salt alone in the case of solutions, with instructions to the patient to dissolve it in a wine-bottle full of water. This is especially done in the case of potassium iodide. In the case of powders these are prescribed in bulk, and the patient is directed to take "as much as will go on the point of a knife." Empty ointment pots and bottles have to be returned to the pharmacist, or the charge for these will have to be made good by the member, is a form of economy enforced by some clubs, while others go to the expense of paying an official to go over all the prescriptions received from the pharmacist, after paying for them, in order to detect any possible errors in charging.

#### Influence on Pharmacy.

It is evident that the sudden extension of the benefits of insurance against sickness to a large section of the community hitherto scarcely able to afford medical attendance, must have had a far-reaching effect on the financial status of the pharmacist; now, however, owing to cheap prescribing (the average price of a prescription is often less than tenpence), and the avoidance of prescription charges by arranging that several simple remedies, such as boric acid ointment, liniment of ammonia, etc., shall be charged as "counter-sales," there is in Germany a great deal of poorly remunerative work, but German pharmacists have firmly resisted any attempts to derive profit from the sole supply of medicine to one sick club to the exclusion of other pharmacies by offering special reductions. There are only a few cases of this kind on record, and usually the sick-club member is free to take his prescription where he likes to have it made up. In certain cases a special rebate on the tariff charges is granted by the pharmacists to certain sick clubs, and in some States (Baden) the Government compels the pharmacist to grant a minimum rebate (10 per cent.) on the official prescription tariff charges in favour of the sick clubs. In Saxony, for instance, a large number of articles are considered as "counter-sales," and charged according to a special tariff agreed upon between the Pharmaceutical Association of that kingdom and the sick clubs. The following figures give some idea of the importance of the sickness insurance scheme at present in force in Germany, the figures being based on the returns for 1907 for the whole of the Empire:

Total membership of sick clubs, 12,138,966 persons (20 per cent. of the population).

Total amount of sick-club contributions levied, 15,018,959l.

Total expenditure, 14,954,738l.

Of the above expenditure:

3,166,289l. was paid for medical attendance;

2,007,887l. was paid for medicines and appliances;

6,070,805l. was paid for sick pay;

1,808,382l. was paid to hospitals;

10,228l. was paid to convalescents;

834,645l. was paid for managing expenses.

The total reserve funds held by the sick clubs amounted to about 12,000,000l.

It will be seen that the system is peculiarly adapted to Germany, and if similar provisions are to be made in the British Bill we come face to face with a difficulty which our Continental colleagues have not, viz.—dispensing by physicians, and the sale of non-toxic medicines by

anybody. In Italy the question of the pharmacist's right in the dispensing of medicines for charitable institutions and other bodies has been solved. The Government has issued an official prescription tariff, and has made special provision for the charging of prescriptions on account of the members of such institutions. The rebate to be granted is graded according to the total of the bill, while if for one institution the same prescription is written out several times by the doctor in the course of the same round of visits, the whole quantity is charged as if it were one prescription. With us such an arrangement is unthinkable, but it is at the present stage needless to speculate on what may happen until we know exactly what the Government proposals are. If they include the supply of medicine or medical or surgical appliances, the innovation may be made the opportunity of a movement which may ultimately put pharmaceutical practice on a better footing than it is at present.

### The Shops Bill.

FIFTY good men and true sitting in a Committee Room of the House of Commons at Westminster on Thursday afternoon began consideration of the Home Office Bill to consolidate, amend, and extend the Shops Regulation Acts, 1892 to 1904. At the outset Mr. W. S. Glyn-Jones, M.P., a member of the Committee, proposed to reverse the principle upon which the provisions of the Bill are based. The Bill is substantially one to limit the weekly working-hours of employés in retail shops, that principle standing in the front of the measures, and it is followed by a second principle according to which shopkeepers in defined localities of the United Kingdom may determine when their shops shall be closed, and the authorities of the localities may give such determinations all the force of law. Mr. Glyn-Jones's proposal has been already referred to in the *C. & D.* (April 15, index folio 548), when we mentioned that he would endeavour to obtain an amendment whereby a fixed maximum number of hours weekly would be imposed on retail shops of all kinds, this provision to be permissive in respect to individual liberty to select what hours the shopkeeper desires to keep open. This would take the place of the sixty hours' week for employés, but would not be prejudicial to their interests. This amendment was put on the Parliamentary papers of Monday, April 24, and is in the following terms:

Mr. Glyn-Jones.—To move the following clause:

(1) No shop shall, save as otherwise provided by this Act, be open for the serving of customers for more than seventy hours in any week. (2) The occupier of a shop shall fix, within the limits allowed by this Section, and shall specify in a notice in the prescribed form, which must be served upon the local authority, the hours during which the shop is open for the serving of customers, and he shall continuously exhibit in a conspicuous place outside the shop a copy of the said notice.

Page 1, postpone Clause 1.

Page 2, postpone Clause 2.

Page 3, postpone Clause 3.

The motion to postpone consideration of the first three clauses is purely formal, and is necessary in order that the principle of the new clause may not be excluded from consideration by the quite opposite principle of the three clauses being adopted at the earliest stage of the proceedings. If this motion is not accepted amendments embodying the principle will be moved to Clause 1 (see Westminster Wisdom). The clauses form Part I. of the Bill, and are devoted to the hours of employment of assistants. Clause 1 is concerned with the hours of employment (sixty hours per week exclusive of meal hours), and meal hours of shop assistants; while it also provides that on one day per week assistants shall not be employed after 2 P.M. Clause 2 deals with

overtime employment (fifteen to thirty hours a year conditionally), and Clause 3 employment in two or more shops. It is obvious that these provisions would be unnecessary to a certain extent if Mr. Glyn-Jones's clause, or anything like it, were adopted, since the working hours in all shops would be a fixed maximum per week. We understand that Mr. Glyn-Jones has fixed on seventy hours provisionally, the actual number being subordinate to the main principle that no shopkeeper can have an advantage over others by carrying on business longer than they. The proposal is novel and almost startling. It is open to many criticisms. For example, it does not appear to be calculated to foster unity, since it does not encourage a uniform closing hour, and that is the great impediment to all shops legislation. This objection may be met, however, as the Bill is moulded into shape, for if the principle of the new clause is accepted by the Committee, it will be associated with other provisions, which may make for unity. While we "wait and see" we should be glad to hear from subscribers what they think about the proposal. The best way to test its applicability is to try to fit it to the business done (1) in localities and (2) in shops according to their nature and situation, using present hours as the guide.

### China and Opium.

A rejoinder in the form of a communiqué has been issued by the Indian Government in regard to the Peking telegram concerning the opium question which appeared in "The Times" last week. The Government states that no agreement has yet been concluded with China, and while it is not able to express any opinion as to the accuracy of the news from China, the seriousness of the effect on Indian finances of the probable earlier cessation of the opium trade is recognised in all circles. The Government of India is strongly pressed (says the "Times" Bombay correspondent) to issue an official statement clearing up the ambiguities of the present situation, but it is understood that the Government is unable to make any announcement. It is impossible, therefore, to form an accurate opinion as to the state of the Imperial Government's negotiations with China, their possible duration, or their effect on trade and exchange with China. The ambiguities of the situation cause loss, and it is strongly felt that they should be promptly removed by an official pronouncement.

### Secret Remedies.

We understand that one aspect of the inquiry which is being conducted at the House of Commons by the Food Reform Committee and the Parliamentary Committee, dealing with the adulteration of food, has reference to the question of patent or proprietary medicines. The Chairman of the Amalgamated Committee is Mr. J. S. Fletcher, M.P.; and a further meeting, which was attended by, among others, Mr. Charles Bathurst and Mr. C. S. Goldman, was held at the House of Commons on Tuesday afternoon. In all the Committee numbers about twenty or thirty members. The object of the Committee is to ascertain what foreign countries (notably Germany, France, and the United States), and also the Colonies, are doing in regard to regulating inquiry into secret remedies. Up to the present considerable difficulty has been experienced in securing this information through the medium of the British representatives in the capitals mentioned. The desire of the Committee is that it should be made compulsory that the label on the bottle or other vessel should constitute a legal warrant as to the ingredients contained therein. This, it may be remembered, is part of the question which Lord Gladstone, when Home Secretary, expressed himself in favour of referring to a Departmental Committee. The other aspect of the question—the policy

of requiring the manufacturers of all such medicines to indicate on the label the nature of the ills which they profess to cure—is regarded as much more difficult of accomplishment. Both of these questions are engaging the attention of the Home Office at the moment, which was made clear in the letter from Mr. Churchill to Mr. Stephen Collins, M.P., which appeared in the *C. & D.* of April 22. The Committee is also devoting its attention to the question of purity in bread and milk.

### An Iniquitous Order.

Russia bars the importation of medicinal preparations as much as possible, most stringent regulations being applied in favour of its own pharmacists. The latest Ministerial decree has carried with it the following order by the Inspector-General of Health:

"By the decision of the Medical Council, given on February 21, 1911, the permission granted to import a medicine of any kind into Russia, and the publication of the composition of the preparation in the 'Journal of Judicial and Practical Medicine,' is equivalent to granting permission to all pharmacists of the Empire to produce these preparations and bring them on the market in the same composition and under the original name, on the condition, however, that firm and place of production be visibly indicated on the label."

This is the most socialistic order that we have ever heard of, even for so autocratic a country as Russia. It means, for example, that if John Smith & Co. get permission to import into Russia a preparation, say, "Smith's Mixture," which has been received with high favour by the medical profession and is a valuable property, as soon as that permission is granted, and the fact gazetted, Russian pharmacists may make and sell "Smith's Mixture," provided they put their own name and address on the label, however they may have made the stuff. Apparently the Russian authorities are ignorant of the fact that method is a most material part in the production of medicines.

### Drainage and Malaria.

Colonel Walter Gawen King, C.I.E., in commenting in "Nature" of April 20 upon Dr. Malcolm Watson's book on "The Prevention of Malaria in the Federated Malay States," waxes caustic at the expense of the sanitary experts of the Indian Government, and throws new light on the recommendation of quinine. He says:

"In India the sanitary expert adviser of the complacent type must either 'bend or break' under the weight of official opinion (held as strongly by the youngest Under-Secretary as the veteran Financial Member) that the Sanitary Department must be classed financially as 'unproductive,' and must therefore be, in its representations involving expense, tactfully unobtrusive. Hence, possibly, the unconscious evolution of the policy of 'quinine prophylaxis,' which would relieve the Government of India from applications for loans and 'free grants' for radical anti-malarial measures, such as drainage works, requiring the sinking of capital, and would throw upon the inhabitants of malarious areas (who are notoriously impecunious as a sequence of disability to labour) the onus of purchasing an expensive drug—through an indefinite number of years."

Colonel King is a retired officer of the Indian Medical Service who has fulfilled a multiplicity of offices, from army surgeon, Professor of Hygiene at Madras Medical College, and Sanitary Commissioner to the Governments of Madras and Burma. The above statement would show that the most important means of malaria prevention is, to say the least, neglected.

### Chemists' Dental Society.

A meeting of this society is to take place on Thursday evening, May 11, at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C. Those chemists who are visiting London are reminded that the place of meeting is easily accessible from the Chemists' Exhibition. The Bank Station on the Central London Railway is within two minutes of the *C. & D.* office, whilst the Mansion House Station on the Metropolitan Railway is

next door. The secretary desires to state that any amendments of the draft by-laws which have not already been sent to him must be in his hands at least a week before the date of the meeting so that the effect of the suggested alterations may be duly considered. Amendments in regard to the amount of the subscription and the qualifications for membership are being drafted for submission to the meeting.

### Belladonna Plasters.

We are indebted to a wholesale friend for some observations in regard to a misapprehension as to whether or not belladonna plasters are a scheduled poison. He says:

"It has been the common practice of drug-stores and others not qualified chemists to sell such, but recently it has come to my knowledge that the Pharmaceutical Society are taking action, and in one or two cases they have pressed for the penalty which is incurred by the unqualified seller of a poison. I think it only fair that some warning should be issued, especially as a person reading the Act without giving due thought which is necessary can easily be misled by the exception made to belladonna under Part I. of the schedule."

It is somewhat surprising that anyone has imagined that belladonna plasters have ever been excluded from the poisons schedule. The idea probably arises from the fact that the belladonna entry in the schedule to the Poisons and Pharmacy Bill of 1908 would have included belladonna plasters in the first part. Therefore, legal vendors of the plasters could only have sold to persons known to them, or introduced to them by a known person, and with all the formality of entry in the poisons book. Consequent upon representations made to the Privy Council, this entry was modified by adding, parenthetically, "except belladonna plasters." This merely had the effect of freeing the plasters from Part I. conditions, because the final entry in the schedule brings into it "all preparations or admixtures which are not included in Part I. of this schedule." Obviously, therefore, as belladonna plasters are not included in Part I., they are included in Part II., being preparations of belladonna, and care must be taken by all vendors to label them "Poison." The Supplementary List of Poisons, which we published early in 1909, contains the entry "Emp. belladonnæ (2)," and we do not know any authority on the subject who has supposed that belladonna plasters are not a scheduled poison. Mr. W. S. Glyn-Jones, in his book, states specifically (p. 117), under "Belladonna Alkaloids":

"All preparations or admixtures (except belladonna-plasters, which, if they contain belladonna or belladonna alkaloids, are in Part II.) containing 0.1 per cent. of belladonna alkaloids (1)."

We know as a fact that it was never intended to exclude belladonna plasters from the schedule, and when the Bill was before Parliament and the alteration was made we contradicted certain statements made by interested persons to the effect that they had succeeded in getting belladonna plasters excluded from the schedule.

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MR. J. J. MEAKINS, chemist and druggist, has purchased the business formerly carried on by Mr. J. P. Hawley, chemist, at The Tower Pharmacy, 3 Market Place, Evesham.

MR. THOMAS FELL, chemist, late of Harrod's Stores, Ltd., has been appointed general manager, with a seat on the board of directors, of S. F. Goss, Ltd., chemists, London, W., in the place of Mr. C. Nobbs, who has severed his connection with the company.

SPANISH OLIVE OIL.—H.M. Consul at Seville reports, under date March 29, that owing to the almost complete failure of the last crop of olives in many districts the supply of olive oil is somewhat short, and prices have in consequence been high. They appear, however, to be falling steadily, as the recent heavy rains and the general weather conditions favour the blossoming of the trees, and it is hoped that the next crop will be a good one.

## Trade Novelties of the Week.

**MEINECKE'S PERFECTION BED-PANS** are made in Great Britain by Messrs. Grimwades, Ltd., Stoke-on-Trent, who supply only the wholesale trade. The bed-pans are stocked by the principal druggists' sundries houses.

**BROWN'S SANITARY FLUID** is made by Messrs. Brown & Blackburn, ammonia manufacturers, Thongsbridge, Huddersfield, who inform us that it is of high efficiency and that they supply it to the leading corporations and railway companies.

**"DIAMALT."**—The British Diamalt Co., 11 and 13 Southark Street, London, S.E., make a point in their advertisement of the exceptional diastasic powers of their product. A reference is given to an impartial examination of a series of commercial extracts which places diamalt well ahead of any other.

**PHARMACEUTICAL MACHINERY.**—Mr. J. A. Muirhead, adacaster, Yorks, maker of pharmaceutical and chemical machinery, specialises in portable plants for colonial use. His advertisement in this issue enumerates some of the apparatus which he is in a position to supply on advantageous terms.

**THETFORD PULP-WARE.**—Two useful lines in Thetford Pulp Ware are indicated in the advertisement of the Patent Pulp Manufacturing Co., Ltd., 38 York Road, London.

These are Lewis' sanitary chamberine covers for covering chamber utensils, and a new line in ladies' bath water-puff boxes in large size.

**IMPERIAL VIOLET.**—Messrs. Heppell & Co., 38, Chandos Street, London, W.C., whose advertisement appears in this issue, are special agents for Urillac (gout and rheumatism remedy), Delphinine (a sea-sickness cure), and Sop Rami (a cough syrup). The firm are also introducing Imperial Violet, a perfume put up in one size only, and retails at 7s. 6d. per bottle.

**"ERASMIC" COMPETITION.**—The Erasmic Co., Ltd., Warrington, announce in our advertising pages the inauguration of a new window-display competition in which thirty-three cash prizes amounting to 115*l.* are offered. The period within which the window-shows are to take place is from May 1 to August 31, the goods to be shown being the Erasmic toilet soap and perfume specialities.

**WE WILL INTEREST COLONIAL CHEMISTS** to know that Messrs. Burgoyne, Burbidges & Co., manufacturing chemists and wholesale druggists, Coleman Street, London, E.C., now publish a very complete export price-list of their own manufactures and all goods required by chemists and druggists, physicians and surgeons. The firm will supply copies to applicants from abroad on authentication by business card.

**A.T.A. PRICES.**—The additions to the Protected List for April are: Barkola globes, Buxton liver salt, Daggett & Ramsdell's cold-cream, Grossmith's Fascination perfume, John Bell, Hills & Lucas's additional preparations, Mado toilet-paper, Parfumerie Lubin, Pixoap, Rooke, Dr. Charles, Ltd.'s preparations, Wamol hair-preparations, Wiley's Valkasa. The removals are: Buvo, Towle's 4s. 6d. size pennyroyal and steel pills.

**CHRISTY'S LIST.**—Messrs. Thomas Christy & Co., Old Swan Lane, London, E.C., have issued a new edition of the price-list of toilet requisites, perfumery, pharmaceutical, chemical and photographic goods, together with the proprietary articles for which the firm are British agents. As in previous lists, the cover is an artistic production, and the catalogue portion being printed on smooth paper the illustrations are true to nature. The list is a fine record of attractive novelties, some of the features being indicated in our advertisement in this issue.

**PHOTOGRAPHIC SUNDRIES.**—The Altrincham Rubber Co., Moburn Buildings, Altrincham, have sent us a copy of the new price list, in which are enumerated the many useful photographic specialities of the house. These include shutters, camera and lens cases, backgrounds, lantern-screens, focussing cloths, squeegee pads, and rubber accessories of all kinds. The catalogue is a useful one for photographic chemists, and as the present is the time

of the year when most dealers make up orders for these goods, it is advisable that they obtain first a copy of the list.

**SOLPORT'S LIST.**—Messrs. Solport Bros., 188 and 190 Goswell Road, London, E.C., have just issued a new edition of their price-list, which gives a selection of the special druggists' sundries that they manufacture for the export and wholesale trade. The list contains about 44 pages, and therein are enumerated and illustrated such lines as felt corn and bunion plasters, filter bags, bath and flesh gloves, loofah gloves, washing squares, friction straps and gloves, chest-protectors, bodybelts, hot-waterbottle covers, puffs, face chamois, eye-shades, vaccination shields, socks, court-plaster, respirators, and finger-stalls. Buyers of these goods should send for a copy of the list.

**PETER'S MILK CHOCOLATE.**—The sale of a high-class chocolate is particularly suited for sale by chemists. Especially is this the case where the chocolate is combined with milk and thus its value as a food increased. The practice is growing with medical men of recommending Peter's milk chocolate as a nutrient, and this is an additional reason why the pharmacy is the legitimate place where it should be bought. Most of our readers have an acquaintance with Peter's milk chocolate, but it may be pointed out that the variety for eating is put up in discs, while that designed for preparing as a beverage is in triangles. The flavour of the chocolate is excellent, and the soft, velvety taste is appreciated alike by children and adults. Mr. D. Peter, of Vevey, Switzerland, originated the idea of combining chocolate and milk some thirty years ago.

**"CRYSTAL PALACE" MARKING-INK.**—John Bond's "Crystal Palace" marking-ink has a hundred years' reputation behind it, and hardly needs further encomiums. It is well, however, to emphasise the fact that the proprietors take care to keep abreast of the times, and that well-considered improvements are systematically adopted. The non-heat variety of marking-ink was introduced to meet a demand, and has established for itself a reputation equal to that of the original ink. A new kind of package has recently been introduced for the non-heat ink. This is a square package, the ink and metallic pen being contained in a square slide box. The convenience of this style will be appreciated, especially by exporters and over-seas chemists. The round package is still produced, so that it is as well to indicate on the order which style is desired. The address of the makers is 75 Southgate Road, London, N.

**PRICHARD & CONSTANCE, LTD.,** 71 Newman Street, London, W., are another retail firm to invade the ranks of the wholesale. When Messrs. T. W. Theakston and R. H. Brittain, in 1909, took over the business of Prichard & Constance, the returns stood at about 1,000*l.*, but after two years of hard work, coupled with the merits of the "Amami" series of perfumery, their 1910 balance-sheet showed a turnover of 5,290*l.* The directors have now determined to enter a wider field of wholesale trading. Both Mr. Theakston and Mr. Brittain have held important positions in the West End, and Mr. Brittain will be known to many of our readers as a past president of the Chemists' Assistants Association. Their retail experience will be of considerable advantage to them in their new sphere as they can better appreciate the requirements of the retailer. Portraits of the directors are given in the advertisement of the company in this issue.

**"DUO-IN-UNO" CLINICAL THERMOMETER.**—Messrs. Burge, Warren, & Ridgley, Ltd., 91 and 92 Great Saffron Hill, London, E.C., have sent us for trial one of the patent "Duo-in-Uno" clinical thermometers which they are advertising in *THE CHEMIST AND DRUGGIST*. The thermometer has been especially designed with the object of doing away with the excessive exertion required to reset the ordinary pattern clinicals. There is a double constriction above the bulb—the peculiar form being shown in the advertisement—which it is claimed by the makers

enables the mercury to be reset with one shake. As our readers will agree, any improvement which overcomes the perennial difficulty which the public have in shaking down the mercury, is a good selling point. The thermometer we have examined is marked as "one to two minutes," and it has a lens front which gives for reading a good broad column of mercury.

"RIEDEL'S BERICHTE."—The J. D. Riedel Co., 54 Cannon Street, London, E.C., have sent us a copy of the 1911 "Riedel's Berichte and Mentor." The portion to which "Berichte" is applied occupies thirty-three pages, and consists of reports on researches conducted in the laboratories of the company. Part II. deals with advances in pharmacy and therapeutics during 1910, and consists of concise paragraphs on medicinal substances, references being in each case given to the original paper from which the abstract is made. Part III.—the "Mentor"—is devoted to newer remedies. Particulars are given against each drug as to the composition, uses, dosage, and manufacturer. Part IV. deals with Riedel's special preparations, and there is a supplementary table which gives the variations in the specific gravity, between 11° and 30° C., for the liquid preparations of the German Pharmacopoeia, the official temperature being 15° C. The book is in German, and any of our readers who desire a copy should apply to Messrs. Riedel.

VARALDI'S MANUFACTURES.—We have received an advance copy of the English price list of essential oils, pomades, perfume extracts, floral water, etc., manufactured by Mr. F. Varaldi, Cannes-La Bocca, France, whose sole agent in the United Kingdom is Mr. W. Bonser Hayward, 17 Lawrence Lane, Cheapside, London, E.C. The list is a useful one for large users of perfumery and flavouring products, and contains a number of special products. Mr. Varaldi has also sent us specimens of his "olive oil vierge," which is put up in  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and 1-pint bottles, ready for retailing, in which form it would be particularly acceptable to chemists' customers who appreciate the advantages of pure olive oil in preparing salads. The oil is also supplied in 1-gal. tins and in casks or drums, from 30 gals. upwards. Mr. Varaldi has also submitted specimens of small copper bottles for triple extracts. These are already in demand in those countries whose Customs tariff for perfumes is imposed by weight upon the perfume and its container. The copper bottles are much lighter than glass, and might be a catching novelty in this country and in the Colonies.

PEARS' ANNUAL.—In the course of a recent interview with Mr. Thomas J. Barratt, chairman and managing director of Messrs A. & F. Pears, Ltd., conversation turned upon the famous "Pears' Annual," and the circulation figures which we were shown struck us as of such interest that we repeat them in this issue, which specially appeals to dealers in Pears' Soap all over the world. The distribution of the last "Pears' Annual" was as follows:

British Isles ... ..	346,147
Australia and New Zealand ... ..	68,157
Continent ... ..	8,896
United States of America ... ..	8,250
Canada ... ..	7,254
India ... ..	5,347
South Africa ... ..	3,198
South America ... ..	913
West Indies ... ..	782
China and Japan ... ..	532
Various foreign towns ... ..	578
Total ... ..	450,054

We also saw some of the pictures which are being prepared for next year's issue, but it would be premature to enter into details. The point of this note is to emphasise the fact that the proprietors of Pears' soap are constantly advertising their products in one way or other, and that this means a constant supply of customers to the chemist.

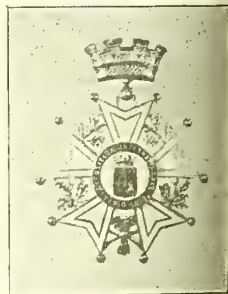
COMPLEXION AND SKIN CREAMS.—There is no department of the art of compounding in which we receive more inquiries than that concerned with the production of modern forms of vanishing and massage creams. Many chemists seem to have difficulty in obtaining just what they would like, and to such we would suggest the "Crembas" way of making them. We are indebted to Messrs.

Peter Möller, Ltd., 18 High Holborn, London W.C., who are the agents for "Crembas," for specimens of vanishing cream and massage cream made with that useful base. The vanishing cream is a snow-white and deliciously perfumed preparation which is cooling to the skin, and when rubbed on it disappears, leaving no greasy feeling, but imparts a softness to the skin such as ladies desire. The massage cream is of a cream colour rather than snow-white, and, like the vanishing cream, is nicely perfumed. It also disappears when rubbed into the skin, but in this case there is incorporated with the preparation a sufficient amount of a neutral oleaceous body which softens the skin and prevents chapping in those cases where, either by exposure or from other causes, the skin is apt to become dry. Both these preparations are equally suitable for summer and winter use. They are particularly suited for tropical climates and colonial requirements. It is the "Crembas" from which they are made that Messrs. Peter Möller supply in 1-lb. packages at 2s. 6d. each, sufficient to make at least six times the amount of vanishing or massage cream, by the simple addition of water and other ingredients which are indicated in the formulae that Messrs. Peter Möller furnish with "Crembas." It may also be obtained through any wholesale house in Great Britain or the Colonies.

PARIS EXHIBITION MEDALS.—We are indebted to Messrs. T. F. Bristow & Co., Ltd., St. James's Walk, Clerkenwell, London, E.C., for the loan of the originals from which the accompanying engravings have been made. They represent the Gold Medal and Grand Prix awarded to them by the jury of the Exposition Internationale Cuisine, Alimentation et Hygiène, promoted by the Union Philanthropique-Société Technique de l'Alimentation, which has been held in Paris this spring, and at which a number of



GOLD MEDAL.

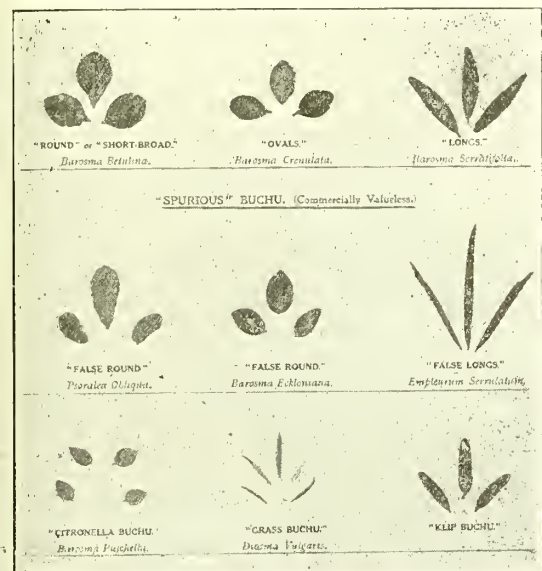


GRAND PRIX.

English firms exhibited. Messrs. Bristow showed their perfumes and soaps and received a Grand Prix, Gold Medal and Diploma of Honour. The original of the medal measures  $2\frac{1}{4}$  in. in diameter. We show the obverse, and the reverse is made up of an oak and palm wreath surrounding the name of the Société and of the Exposition. The Grand Prix is shown in the second engraving. It is executed in gold and white enamel and is to be worn like an order. The original measures  $3\frac{1}{2}$  in. deep by  $2\frac{1}{4}$  in. wide. The Diploma of Honour is also a fine production in plastic work, showing that artistic character for which French designers are so noted.

MOUNTED BUCHU SPECIMENS.—In view of the great scarcity and consequent high prices of genuine buchu last year, various small shipments of leaves described as such were offered on the London market. A few of the most prominent varieties have been identified. Messrs. H. Hymans & Co., drug and produce importers, 13 and 14 Trinity Square, London, E.C., have prepared mounted specimens, framed, for their regular customers, showing the types of genuine buchu—i.e., commercially recognised. These include "round" or "short-broad" (*Barosma betulina*), "ovals" (*B. crenulata*), "longs" (*B. serratifolia*). The specimens of "spurious" buchu include "false round" (*Psoralea obliqua* and *B. Eckloniana*), "false longs" (*Empleurum serrulatum*), "citronella buchu" (*B. pulchella*), "grass buchu" (*Diosma vulgaris*), and klip buchu. Occasionally parcels of genuine leaves containing

an admixture of one or other of the above false types have been received, including "long leaves" more or less mixed with klip buchu, so that it is advisable for buyers to be



on the look-out for such. There are at least seventy varieties of buchu known to botanists, but the framed specimens were the chief received on the London market.

**ALLEN'S DRUG-MILLS.**—A C. & D. representative spent a pleasant half-hour this week in an inspection of alterations and improvements at the drug and spice mills of Messrs. Stafford Allen & Sons, Ltd., Cowper Street, London, E.C. The number of manufacturing premises in the City tends to diminish each year on account of the ever-increasing value of real property in that favoured area, and the same compels commercial firms to make the most of the space at their disposal. In the case of Messrs. Stafford Allen & Sons considerable improvements have been effected by a reconstruction of that part of their premises devoted to the office and the analytical laboratory. The ground floor has been extended to form a well-lighted and roomy general office, with a separate room for the typists and the telephone boxes. There is a waiting-room for callers, and on the wall we noticed the souvenir frames of photographs of the company's ill-fated exhibits at the Brussels Exhibition last year, these pictures having been shown in the reconstructed British Section. The upper floor of the building, devoted to the analytical laboratories, has also undergone considerable modification. Here plenty of light is now available, the iron-frame windows along one side being flanked by a substantial bench for titrations and colour-tests. There have also been provided a balance-room and dark-room, the latter for refractometer determinations, which naturally bulk very largely in the tests of distillers of essential oils. The balances are placed on a broad shelf, and to avoid vibration as much as possible the iron brackets have received special attention. Both these rooms are kept at normal temperature, a matter which does not present much difficulty in the case of premises where steam supply is always available. It is noticeable, so that the various pipes—water, gas, and steam—are not in close to the wall, but in positions—along the centre of the room and beneath the fume-cupboards, for example—where the various forces are required. In this way the problems of connecting up are made much easier. While in this laboratory we were shown some fine samples of concrete oils which the company are perfecting. These wereorrisid lavender and are made by an extraction process. The vander oil is particularly interesting and should be a valuable improvement in preparing specialities with a vander flavour. It is in the form of a thick extractive, and although the solvent employed in its manufacture produces traces of waxy matter, these do not present any

practical difficulties in compounding perfumes. The point about these extraction oils is that the avoidance of heat enables the true odour of the plant to be presented, but, the method of preparation being more costly, the price is somewhat enhanced. It is of considerable interest to have to record that Messrs. Stafford Allen & Sons, with a name for genuine essential-oils unequalled in the wide world, are not content to rest on their laurels, but are prepared to meet fresh demands for natural-perfume material in regard to which their position as growers gives them such fine opportunities. Our representative also visited the vaults connected with the premises. In an isolated section shut off by iron doors is stored a valuable stock of essential oils, the thick walls of the vault ensuring a natural cold-storage. The accumulators for the electric-light supply are stacked in another vault, and this reminds us that the electricity for the electric light employed throughout is generated on the premises. Dynamos are attached to the engines. We noted a very fine Diesel engine, and not far off a gas-engine of 100 horse-power, both working, as the amount of power required for the drug-mills is very considerable. The method by which the water-gas is obtained for the gas-engine from anthracite and water vapour is a lesson in technical chemistry which many a student would be glad to see in actual working. A visit to the engineer's "shop" concluded the round of the departments where improvements have been introduced recently.

## FESTIVITIES.

### Whist-drives.

A WHIST-DRIVE, held under the auspices of the Bournemouth Pharmaceutical Association at Gervis Hall on April 21, proved highly successful, thirty-three tables being requisitioned. The prizes were presented by Miss Gamble to the following prize-winners: *Ladies*—Miss Beecham, Mrs. Moore, Miss Cole, Mrs. Harris. *Gentlemen*—Mr. F. Parsons, Mr. Holland, Mr. A. Jarvis, Mr. J. Williams. Mr. J. H. Scampton ably officiated as M.C.

THE Western Pharmacists' Association held a whist-drive at Frascati's Restaurant, Oxford Street, London, W., on April 26. Mr. H. Raithby Procter (the President) was the chairman, and there were present ninety-two members and friends. The prizes were distributed by Mrs. Procter to the following winners: *Ladies*—(1) Mrs. Charles Brookes, (2) Mrs. Present, *Gentlemen*—(1) Mr. Harry Martin (B. W. & Co.), (2) Mr. Sixsmith (B. W. & Co.).

### Bohemian Concert.

The Croydon and District Pharmacists' Association gave a Bohemian Concert in the Concert Hall, Greyhound Hotel, Croydon, on Wednesday, April 26, to a very appreciative audience, composed of pharmacists and their friends. Mr. H. Paget-Matthews (President) occupied the chair. An excellent programme was arranged. Miss Zoe King was delightful in her cleverly rendered songs and whistling, each time being recalled. Miss Eleanor Baker showed excellent training, her voice being particularly sweet and clear. Miss Edith Ashby was much appreciated as a piano soloist and accompanist. Miss Irene Howard was charming in both her songs, and gave great pleasure. Mr. Ernest Wellbeloved as an elocutionist was remarkable, especially in his series of character sketches from Dickens, being recalled again and again. Mr. Ernest Drummond has a voice of excellent quality, and was much applauded for both his songs. Mr. Alfred Milner sang in good style, being vigorously encored. Mr. Geo. Robertson, as a refined comedian, was most entertaining. The concert was arranged by Mr. J. Pinto Nash, and pleased everybody.

## BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

THE Bradford Co-operative Society, Ltd., whose central premises are situated in Sunbridge Road, Bradford, are opening a drug department.

MR. H. J. HOWLETT, chemist and druggist, late of Southsea, has purchased the business from Mr. J. H. Franks at High Street, Ewell, Surrey.

MR. JOHN VINCENT, Ph.C., late manager of the Marine Drug Stores, Ltd., Clapham, has opened an up-to-date pharmacy at 94 High Street, Clapham.

## WINTER SESSION.

### Association Presidents.

Of all the cities and towns in England, apart from London, Hull is the only one which has the distinction of supporting



Mr. R. F. JONES

two associations of chemists, namely, the Hull and District Pharmacists' Association and the Hull Chemists' Trade Association. The latter is of comparatively recent origin, but the former dates from 1868, and it has at various times had a wider influence in trade matters than in its own district. The President for the session 1911-12 is Mr. Robert Frederick Jones, who succeeded Mr. J. F. Robson. Previously Mr. Jones was Vice-President and a member of the committee. He is a native of Hull, where he was born six-and-thirty years ago, and after his school education he served an apprenticeship of four

years with Mr. C. H. Kirton, Ph.C., 55 Savile Street, Hull. Subsequently he studied for the Minor examination for six months at Muter's South London College of Pharmacy, and qualified in January 1897. He then took situations to extend his experience, first at Scarborough, next in the West-end of London, and finally with Messrs. Deacon & Co., Beckenham. Ten years ago he returned to Hull and bought the business of the late Mr. James Oldhand at 167 Anlaby Road, which he has carried on since. Besides his other offices, Mr. Jones has acted as musical director of the social functions held in connection with the Association.

### Brief Records.

**Huddersfield Chemists' Association.**—A meeting was held on April 25 at the Queen's Hotel, Mr. S. Stephens (the President) in the chair. With reference to the increased prices of such commodities as seed-oils, turpentine, and certain drugs, a discussion took place, but it was considered unwise to establish a uniform price-list, as such a list would be an incentive to the drug-stores to undercut.

**Irish Chemists' Assistants' Association.**—A committee meeting of the Belfast Branch was held in Clarence Place Buildings, May Street, on April 20. Mr. John Law presided. It was reported that the new rooms, College Square, will be ready early in May. The finances of the year were shown to be in a satisfactory condition. It was agreed to change the name of the Belfast Branch to the "Ulster Chemists' Assistants' Association," and to have a yearly subscription of one shilling. The change in the title has been made so that members from any part of the North of Ireland can join.

**Forfarshire Chemists' Association.**—The annual business meeting was held in Mather's Hotel, Dundee, on April 19, with Mr. John Anderson (President) in the chair. There was a good attendance. The Chairman after a brief reference to the events of the past year, called upon Mr. Hunt (interim Secretary) to present his report. It was intimated that the accounts for the year showed a credit balance of 3*l.* 19*s.* 7*d.* The office-bearers were then elected (*C. & D.*, April 22, *Col. Supp.*). The invitation to visit the Pharmaceutical Society's headquarters in May next was laid before the members. The committee were empowered to make arrangements for the annual excursion next month.

**Society of Pharmacy and Drug Store Proprietors.**—A special sub-committee meeting was held at the Queen's Hotel, Manchester, on Monday, April 24. Present: Messrs. W. Huntrods (President), G. Childe, I. Eskriett and J. B. Clarkson (Treasurer). In consequence of the Association Cup Final being played at Manchester on Wednesday, it was decided to postpone the inaugural meeting of the Manchester and district branch until May 3. The president stated that he had written the Home Secretary with regard to the Shops Bill, suggesting that in view of the annual decrease in the number of registered chemists, and the corresponding increase in the number of pharmacy and drug store proprietors, that the sale of medicines and surgical appliances after closing hours should be restricted to the latter body of retailers, who exist in sufficient numbers to satisfy the public requirements.

**Nottingham Pharmaceutical Association.**—A meeting was held at the George Hotel on April 26, the Vice-

President, Mr. F. Ross Sergeant, in the chair. There were present, among others, Mr. W. Gill, Mr. A. Eberlin, A. E. Beilby, A. Middleton (Treasurer), and H. P. Middleton, H. Brown, E. E. Dickinson, C. E. Reynolds, T. J. Williamson, A. A. Ringer, T. Wilson, C. Bolton, and T. Freeman, and E. E. Turton (Secretaries), and two ladies. A lecture was delivered by Mr. W. Gill on *Bacteria—their place in the economy of nature*. Mr. Gill first described some of the varieties of bacteria, and defined many of the terms used, such as Bacillus, Coccus and its variations and multiplications, and then discoursed upon those which are useful and helpful as distinguished from those which are harmful. He entered into details of the work they do to assist vegetation, their aid in such processes as brewing, malting, vinegar-manufacture, cheesemaking, and the treatment of sewage. Messrs. A. Eberlin, A. Middleton, F. R. Sergeant, and A. E. Beilby took part in the discussion. A vote of thanks was accorded to the lecturer.

### Public Pharmacists' and Dispensers' Association.

The lateness of the last meeting of the session was the cause of the moderate gathering who assembled to hear a lantern lecture by Mr. F. W. Noad Clark, at the St. Bride Institute, on April 26. The first part of the lecture dealt with ticks, which are in some tropical countries an intolerable pest, being the cause of widespread diseases in cattle and poultry. Texas cattle fever or "red water" was given as one of the specific febrile diseases probably transmitted by ticks. The British species were shown, also the mite (*acarus scabiei*), and the sheep-tick or ked (not a true tick), while photo-micrographs of a few representative foreign ticks were also thrown on to the screen. The latter half of the lecture consisted of numerous slides of interesting and beautiful microscopical objects, such as moths and butterflies' eggs, the ribbon-like palate of the whelk, tongue of blow-fly, tracheal system of insects, fish-lice, desmids, foraminiferous shells, sponge spicules, polycystina, and crystals of santonin and selene acid. The Chairman (Mr. G. W. Udale), in calling for questions, referred to Mr. Clark's well-known reputation as a microscopical expert. After some discussion a cordial vote of thanks was accorded to the lecturer.

### Portsmouth Pharmacists' Association.

At the monthly meeting held at the County Club on April 19 the following members were present: Mr. T. A. White (President), in the chair; and Messrs. Bell, Baker, Barlow, Bown, Chase, Coats, Darling, Donaldson, Fox, Rhodes, E. H. Smith, Sparrow, Tremlett, and Postlethwaite (Hon. Secretary). The report of the Trade Section Committee *re* fixing the amount of poison sold for a penny was considered, and maximum quantities were agreed to (*C. & D.*, April 22, *Col. Supp.*). A letter from Mr. A. B. Lee, who is coaching local student apprentices for their Preliminary examination, was read. It was stated therein that the apprentices' work was of good quality but poor in quantity, and it was asked that more time for study be allowed. The masters present did not favour further time off, and the apprentices will probably be lectured on the advantages of closer study and the evils of counter-attractions. Mr. Barlow raised the question of the local *School Clinic*, asking if any action should be taken regarding the Corporation entering into competition with local chemists. He proposed the election of a small sub-committee to watch events and, if necessary, to make a representation to the local education department. The following members were elected to form the committee: Messrs. T. A. White, Barlow, Postlethwaite, Sparrow, and Tremlett.

**Halifax Chemists' Association.**—Attending the monthly meeting on April 25, were Messrs. W. R. Fielding (President), R. V. Sutcliffe (Secretary), J. W. Tiffany, B. C. Hodgson, P. W. Swire, Gibson Dixon, C. Fielding, and H. K. Woodward. A letter was read from the Halifax Chamber of Trade asking the opinion of the Association concerning the value of *Advertising in Local Church Magazines* and bazaar handbooks; also for suggestions as to what are considered reasonable charges. The meeting did not regard such periodicals as the best method of advertising, but for those who did find it an advantage it would be better to have a uniform scale of charges. The Chemists' Association suggested one guinea per page per annum for magazines, having a circulation of 1,000 per month, and 10*s.* 6*d.* per page per thousand for bazaar handbooks. The meeting expressed disapproval of the practice of *Club Trading* in mills and workshops, a practice which was said to be on the increase. A discussion then took place concerning the action of certain proprietary-medicine proprietors in *Advertising Store Chemists as Agents*. Mr. Dixon said he wrote to one firm about it, and they replied that they would rather not mention any names in their advertisements, but they were practically obliged to. The meeting resolved that a circular be drawn up (Mr. Dixon being asked to do this and submit the same to next meeting) to send to Chemists' Associations throughout the country, urging the need for taking united action on the matter. *The Shops Bill* was introduced for dis-

ussion, but no resolution was passed, the general feeling being that the Bill will not seriously affect chemists.

**Hull Pharmacists' Association.**—A meeting was held at the Grosvenor Hotel, Hull, on Tuesday evening, April 25, Mr. R. J. Jones (President) in the chair. The Secretary reported that the lecture by the City Analyst, Mr. A. R. Tankard, on the sophistications and substitutions of foods and drugs and the present state of our food laws, which had been arranged for April 27, would be delivered a week later. It was stated that Mr. Sawyer, a member, had received the following letter:

The Chemists' Defence Association, Ltd.,  
184 Temple Chambers,  
London, E.C.

R. B. Sawyer, Esq.,  
21 Carr Lane, Hull.  
January 30, 1911.

DEAR SIR,—In reply to yours of the 28th inst., in strict law limited liability companies, as they cannot serve an apprenticeship, are not entitled to the privilege which chemists enjoy in regard to the sale of "known and approved remedies" under certain conditions and unstamped. In practice, however, the Board of Customs and Excise allow limited companies, at any rate those having qualified managers in charge of their drug departments, to exercise the same privilege. I have never heard of them allowing limited companies having no qualified manager to sell dutiable articles unstamped, even though such articles might be known and approved remedies.

Yours faithfully,

W. JOHNSTON.

After the matter had been informally discussed, it was unanimously resolved, on the motion of Mr. Sawyer, seconded by Mr. Chapman, that the attention of the Pharmaceutical Society should be drawn to the question. The Secretary was instructed to obtain particulars as to the cost of a picnic to Retford with a drive round "The Dukeries." May 23 was fixed as the date of the next meeting.

**NOTE BY THE EDITOR.**—In April 1909 the Board of Customs and Excise printed the following paragraph in the official statement about Medicine Stamp-duty:

"The exemption does not apply to sales by an unqualified person. Nor is the benefit of the exemption extended to any medicines, etc., sold by a limited-liability company, co-operative society, or other corporate body, unless the provisions of section 3 (4) (a) and (b) of the Poisons and Pharmacy Act, 1908, are, in all respects, complied with."

Reference is made to this in the *C. & D. Diary*, p. 448, where it is added that "companies carrying on drug-stores, where each shop is not managed by a registered chemist, do not enjoy the exemption." We do not think it wise to push the apprenticeship qualification. Our Hull friends seem to have overlooked the fact that four members of the Pharmaceutical Council who have served regular apprenticeships have converted their businesses into limited companies, and if companies were excluded from the exemption these four businesses would be, as well as every chemist's business which has been incorporated; also every firm of registered chemists in Scotland would (as a corporate body) cease to enjoy the exemption.

**Leicestershire Chemists' Association.**—A meeting of this Association was held at the Turkey Café, Leicester, on April 11, Mr. A. W. Hearnshaw, President, in the chair. There were also present Messrs. Fry, Wilby, E. Young, Thirlby, Clarke, Hind, Hampton, Inglis, Omlin, Ward, Blockley, Johnson, Lewis, Avery, and Marfitt.

Mr. E. A. A. Fry introduced a discussion on

#### THE PHARMACIST AS A CITIZEN.

In endeavouring to formulate what a good citizen is, one is to recognise that public opinion differs considerably regarding the responsibilities of individuals, but demands at each shall voluntarily give something of his capacity for the public good. It is expected of the individual that in a purely personal capacity he should exist without being a greater nuisance than he can avoid to his fellowmen and neighbours, and should endeavour to feather his own nest without offending against the legal and moral orthodox notions of the society and State in which he lives. The two sides of a man's life are the purely self-interested side and the altruistic, patriotic side. Mr. Fry then recounted in a most amusing manner, a number of characteristics of some of the chemists he had come into contact with, showing how ready do temperaments differ. The typical chemist is negatively if not actively virtuous. His habits of life are exclusive and gregarious, unsocial and generally unattractive to his fellow men. He is somewhat egotistical and egoistic, probably due to the partial and strictly technical nature of his education, his retiring habits and the pose he and others have to adopt in the pursuit of any profession having a more or less mystic nature to the public. Lack of imagina-

tion seems to pin his interests down to his immediate surroundings, and so narrows his outlook on life. In his commercial relations he is honest beyond many of his brother traders. The speaker could not see that the chemist shows much desire beyond the spirit of the times in which he lives to improve the position of his employés, either financially or in the matter of hours of labour, except as circumstances compel him. He is usually ready to plead self-interest as an excuse for non-progressive and socially unkind actions, or for neglecting to take steps to remove that portion of his trading which is adverse to the public good. He does not excel in humour, of which the keynote is sympathy, nor does he add greatly to the gaiety of life, and does not usually excel in sport; in fact he is a patient, plodding animal of the carthorse rather than the racehorse type. As a citizen the chemist is usually humdrum, negatively good and not actively bad, meriting greatly neither praise nor censure of the average worldly man. This might be altered for the better if he threw off the fetters of conventions associated with his calling. As a patriot or public-spirited citizen, chemists are somewhat disappointing, because if they threw off their retiring seclusiveness they would be appreciated in public life and refine it, and be an asset to society. There were brilliant exceptions in many towns, but speaking generally one looks in vain for the chemist taking position on public bodies or taking prominence in social and philanthropic movements. The claims of an onerous business is the general excuse which covers many cases, but not all. It is the busy men who do the voluntary work of the world. Apathy and a cultivated exclusiveness, are the great causes of the absence of the chemist in the public life, on the platform or in council chambers, where he is so well fitted to be. To come out into the world more, rub shoulders with his neighbours, get some of his prejudices and bigotries knocked out of him, would do the chemist good, and cause the public to set a higher value on him more nearly approaching his true worth, and render him a better and happier citizen.

Mr. Hampton agreed that chemists should come more out of their shell. They are well fitted for councils, educational and scientific committees, etc.

Mr. Thurlby agreed with the remarks on the chemist's exclusiveness, but recalled some good examples of good citizenship by chemists in Leicester in the past. There are plenty of openings at present all over the country for men of education and erudition.

Mr. Marfitt said the difficulty of being able to obtain qualified men to leave in charge of business was the cause of much of the apparent exclusiveness. To make a living nowadays, a chemist has to stick close to business, competition being so keen. Again, chemists as a rule are not good speakers, and that is a disability.

Mr. Hearnshaw thought Mr. Fry rather cynical. The pharmacist is quite on a par with other traders as a man and in public spirit. Before the Wheeler judgment a chemist was very often a leading man in a town, in fact *the* leading man. It is best to judge a man by circumstances surrounding him.

Mr. Inglis gave some interesting reminiscences of men he had met, and said that, although public-spirited sometimes, it does not follow that those men are always pleasant privately. He agreed with Mr. Marfitt that good work is done in an unobtrusive way by many chemists. Much as a chemist would desire public life he is greatly debarred by the need of qualified assistance, but he could influence public opinion. He wished Mr. Fry had given more emphasis to the moral point of view on the sale of doubtful articles.

Mr. Lewis thought pharmacists are much more in public life than Mr. Fry gives them credit for.

Mr. Brockleby said chemists want to combine spirit of commerce with essence of altruism. He was assured there is a new spirit abroad among chemists.

Mr. Hind said the difficulty in public life is political strife. A chemist has to come out on one side or another. He has to show his colours and say things he would perhaps rather not say. Taking sides would possibly be detrimental to his business welfare.

Mr. Hampton proposed a vote of thanks to Mr. Fry, and Mr. Young seconded the proposition, which was unanimously and heartily carried.

Mr. Fry, replying, said that if chemists allowed themselves to be guided by self-interest they might be worldly wise, but not magnanimous or public-spirited. He agreed that chemists did good work quietly, but argued that it would be better for them if they did more under public light. It would bring them out of themselves.

#### Glasgow Chemists and the Shops Bill.

THE Glasgow and West of Scotland Pharmaceutical Association called a meeting of chemists in the city on April 20 to consider the Shops Bill, and our report follows:

Mr. Guthrie, in the unavoidable absence of Mr. Lennox (President of the Association), presided over a good attendance, and stated that the object of the meeting was to get a general expression of opinion on the Bill.

Mr. J. P. Gilmour said it was quite clear that chemists could employ an assistant for more than sixty hours a week. He took the clause relating to sale of medicine to practically exempt them from the Bill. The question as to what is a medicine had been raised, but he thought they were better without any definition. One thing was clear—viz., that chemists were bound to give a weekly half-holiday. He described the main provisions of the Bill and explained them carefully.

Mr. McKellar, taking the Bill as a whole, said there is no doubt but what it will benefit chemists. The expression "closing the shop" did not mean that there was bound to be any darkening down of lights. He made a strong point that chemists could only employ an assistant for supplying medicines, etc., but that if they kept him even five minutes idle they would be keeping him contrary to the Act. Chemists should accept the Bill and try to make the best of it, because if it shortens hours and makes the conditions not as irksome it will react to the benefit of the trade as a whole and help chemists to get apprentices. The present hours are turning away suitable young men. Although the Bill is not perfect and will create some hardship, it should help to influence doctors to consult earlier.

This point evoked some discussion and mention was made of the fact that in such industrial centres as Clydebank and Govan it had been found possible to close earlier largely as a result of the working of the Shop Hours Act.

Mr. Kitchen advocated taking advantage of the Bill voluntarily, with the object of getting better hours for themselves. He considered the Bill to be a step in the right direction.

Mr. Hart advocated the definition of the expression "the shop shall be closed," so as to prevent a man abusing the privileges of Clause 21, and if chemists were made the subject of a closing order by the local authority it would result in the shop really being closed, and leaving just one on duty instead of as now every one having to stay late.

Mr. Moir was sure chemists would like to have shorter hours, but did not see how they could get them under this Bill. It imposed a lot of vexatious restrictions without doing any good. He feared if chemists were going to close it would tend to make doctors do more of their own dispensing if they found they could not get their prescriptions made up.

Mr. W. L. Currie said that so far as chemists are concerned, Clause 21 entirely cuts the feet away from under the whole Bill.

Mr. McKellar proposed that the meeting approve of the Bill as far as it affects chemists. After further discussion this became the finding of the meeting.

A vote of thanks to Mr. Guthrie for presiding brought the proceedings to a close.

### Sheffield Students' Night.

For their last gathering of the session the Sheffield Pharmaceutical and Chemical Society arranged a Students' Night. The meeting took place on Thursday, April 20, and was an emphatic success. Mr. G. T. W. Newsholme, President, occupied the chair and at the close of the evening gave an address. In view of

### THE THREE YEARS' REGISTRATION.

said Mr. Newsholme, it was wise for them, if they were not already entered as students, to do so. It was a very great pleasure to him to find on the agenda of the Society such a thing as a Students' Night. Years ago they used to have most successful meetings in Sheffield, when they had an extremely successful School of Pharmacy carried on by the Association. They had had as many as forty students at one time. Things had altered. He did not know why they should have done. A great many men who occupied prominent positions in pharmacy to-day were educated at the Sheffield School of Pharmacy. His hope always had been that that school might have been continued. From lack of students and other causes, however, it had to be given up. He welcomed this Students' Night

as a beginning, and hoped that next year they might get young men more interested in the work. A student was not going to be of the slightest use unless he thought for himself. He remembered in his student days they had had to recite from the Pharmacopœia by heart. That was no earthly good. They wanted to know the why and the wherefore. He did want to impress upon young men the importance of doing these things during the time of apprenticeship. A great fault in the present day was that students put off their studies. The Pharmaceutical Society was very anxious that students should avail themselves of all possible facilities. Sheffield was extremely well favoured in this matter of obtaining information in all the subjects required by the Society. The facilities now were greater than ever before.

### TWO INTERESTING DISCOURSES

were then given by Mr. A. H. Culverhouse and Mr. H. B. Hammond. Mr. Culverhouse spoke of the many opportunities and advantages of which students could avail themselves in the way of competitions and scholarships. He instanced the Jacob Bell, Manchester, and the Fairchild Scholarships and the Herbarium Prize among others. He quoted a very apt remark of Huxley's to show the danger of smatterings of knowledge. Huxley said, speaking of medical students: "The knowledge I have looked for was a real, precise, thorough and practical knowledge of fundamentals, whereas that which the best of the candidates in a large proportion of cases had given was a large, extensive, and inaccurate knowledge of superstructure." It was important for the pharmaceutical student to know, in regard to the various processes in the Pharmacopœia, the reason why, rather than the mere facts of the formula.

In the course of his remarks, Mr. Hammond dealt with new chemical tests and pharmacy questions, prescription formulae, problems, etc., with a few materia medica notes. He showed Denigé's new test for morphia, also a new iodine separation method.

In seconding the vote of thanks to Mr. Hammond and Mr. Culverhouse, moved by the President, Mr. H. Antcliffe remarked that one of the chief reasons why a Students' Night appealed to him was that he had been a student under the wing of the Sheffield Society, and through the Society he had been able to qualify without leaving Sheffield, excepting to sit for the examination.

### Liverpool Chemists' Association.

A SPECIAL meeting of pharmacists was convened by the Association at the Royal Institution, Colquitt Street, Liverpool, on Thursday evening, April 20, Mr. Prosper H. Marsden presiding in the absence of Mr. Last, the President. The object of the meeting was to discuss the Shops Bill. There were present Messrs. A. S. Barr, S. Hardy, C. Hare, R. C. Herman, H. Humphreys Jones, J. McTurvy, L. Moreton Parry, H. A. J. Peasnell, H. Peet, E. Prebble, J. H. Robinson, C. E. J. Sendall, C. Symes, E. R. Valpy, O. Waddington, and representatives of the local Press. The Secretary (Mr. H. Humphreys Jones) read a letter from the Pharmaceutical Society inviting local pharmacists to the reception which is to be held in May. A letter was also read which Mr. Robinson had received from the Chemists' Defence Association, Ltd., enclosing a copy of the one to the Home Secretary from the C.D.A. Chairman of Directors, which was published in last week's *C. & D.*

Councillor R. C. Herman, who opened the discussion, said that had the Bill proposed last year become law it would have been very detrimental to their interests, and he was pleased to say that the resolution passed by the Association last year had been very useful, and, no doubt, had effect in the framing of the present Bill, which he did not think they need take in a very serious light, for in only one particular was there much for chemists to fear. Under the Bill the only restrictions as to hours was that assistants should not be kept more than 60 hours each week (which he thought a reasonable maximum), but overtime under certain reasonable conditions was allowed. The objectionable point was that chemists' shops had to be closed on Sundays. His experience was that wherever absolute Sunday closing was

indulged in it became harder work than when the shops were open for certain specified hours. He thought that the C.D.A. proposal to restrict after-hours sales to registered chemists a mistake in tactics. Councillor Herman then explained the provisions of the Bill, and pointed out what he termed a peculiarity in that it allowed assistants to be kept to supply medicine after hours, although they could not be kept to mix up or to keep books. A curious point might arise as to whether a penny "pacifier" was a "surgical appliance." He feared that they were getting legislated to death at the present time, but he thought this was a very good Bill for the protection of assistants, and as long as it did not interfere with the employer he did not consider it was objectionable.

Dr. Charles Symes regarded the Bill as an unwarrantable interference with the liberty of the subject. It was an attempt to destroy the individuality of the trader, and to sap and undermine the business, and another thrust at that big class of men, the backbone of the country—the middle-class man, the shopkeeper, who was being legislated to death in an absurd attempt to pat the working man on the back. They were already overburdened with legislation. He considered that this was a matter which could be well left to mutual arrangement between the assistants and the employers, and he would be inclined to move that they disapproved of the Bill, and claimed that, at any rate, chemists should be excluded from the proposals. He thought that if the Bill becomes law it will be necessary to choose between keeping the law and meeting the requirements of customers.

Mr. Henry Peet said that they could not legislate for all sections of the public in any one Bill. Chemists in market towns, where all the business was done on market day, could afford to close on one half-day, whereas chemists in cosmopolitan city like Liverpool could hardly afford to close at all. They must have the shops open when the trade was there, and on these grounds he strongly objected to the half-day closing proposals. Mr. Peet added that his assistants have a weekly half-holiday, every Bank holiday off, as well as a three weeks' holiday every year. Mr. J. H. Robinson considered that they were so over-legislated for that they would soon have to go to the Town Hall every morning to get a licence to breathe the air. He was dead against the half-day closing proposals. Thousands of people had passed through Liverpool on their way to America that very day, and if their business was lost, it was lost altogether. This Bill would so make it as when an American customer arrived in Liverpool the chemist would have to say to him, "You cannot have a tooth-brush. It's our early closing day, but you can have medicine if you like."

Mr. Hare agreed with Dr. Symes that the Bill was unnecessary. An early-closing Act such as this would not affect him in the least, as his assistants only worked fifty minutes and a half hours a week, and he was there on certain days on a Sunday. He did not think that the people at Westminster were in a position to understand the requirements of the public. The big company concerns were able to close all day on Sunday, and he considered that the chemist was quite capable of looking after both the interests of the public and his own. His relations with his staff were excellent; in fact, he might say they served him with almost pathetic devotion, and he felt that such a Bill as that which was under consideration would set the employer and the assistant against each other.

Mr. L. Moreton Parry was glad to hear that there were chemists who closed early and kept short hours. He thought they had been entertaining angels unawares. Out of three hundred local chemists there were seven who a couple of years ago declined to have anything to do with a suggestion to close early or to come to any agreement with their colleagues in the matter. The only way was to compel the chemist to close at a certain time and all day on Sunday, and this could only be accomplished by legislation.

Dr. Valpy considered himself as an experienced man and said that the chemist was to be thought rather above the ordinary run of shopkeepers, and was quite capable of taking care of himself without having any more special legislation.

Mr. Barr thought that with regard to Sunday work the suggestion of Mr. Herman was a good one, and he thought the custom was prevalent of chemists opening at certain hours for the convenience of the public; these hours were known and customers came quite naturally to them at the hours when they knew that someone would be there to attend to their requirements. If compulsory closing were to become law we should lose a large amount of trade which would never return to us.

Councillor Herman proposed and Mr. A. Steen Barr seconded the following resolution:

"That this meeting of Liverpool and district pharmacists is of opinion that inclusion of their class of business in the second schedule of the Shops Bill is most desirable, as it would prevent the hardship of constant attendance on Sundays by allowing shops to be opened at certain times of the day known and appreciated by the public."

Dr. Symes proposed an amendment to this on the lines indicated in his speech. It was rejected by six votes for to ten against.

Mr. Parry proposed as an amendment "That this meeting of Liverpool chemists supports the Shop Hours Bill and suggests that Clause 21 should apply to registered chemists only." This was not seconded.

The resolution was carried.

## PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. T. H. PRICHARD, chemist, Abertillery, has been elected Chairman of the Abertillery District Council.

MR. C. H. CLARKE, chemist and druggist, has been elected Chairman of the Chepstow Urban District Council.

MR. A. H. FRENCH, dispenser at Camberwell Infirmary, has been appointed dispenser at the Workhouse, Southampton.

MR. H. J. LING, of the Hankow Dispensary, Ltd., who has been in London on business, returns by s.s. *Virginian* on Friday, April 28.

MR. W. H. DIXON, chemist and druggist, East Grinstead, has been elected a representative of the local Urban Council on the Joint Hospital Committee.

MR. W. E. GOFF, Ph.C., of Messrs. Horrell & Goff, chemists, High Street, Dartford, has been elected Vice-Chairman of the local Urban District Council.

MR. ROBERT WOOLLEY WALDEN, chemist and druggist, has been re-elected Chairman, for the second year, of the Guardians of St. George's (Hanover Square) Union.

ALDERMAN F. BIRD, chemist and druggist, 156 Spon Street, Coventry, has been re-elected a trustee of the General Municipal Charities by the City Council.

MR. R. D. DOBLE, chemist and druggist, who headed the poll at the recent election, has been unanimously re-elected Chairman of the Tavistock Urban Council.

MR. WILLIAM TURVER, chemist, manager for Boots, Ltd., Cheetham Hill, Manchester, was elected a Rector's side-man at the Easter vestry meeting of St. Matthew's Church, Crumpsall, on April 19.

MR. G. T. W. NEWSHOLME, President of the Sheffield Pharmaceutical and Chemical Society, has been elected for the second time in succession to the Chairmanship of the Sheffield Board of Guardians.

MASTER JOHN HENDERSON DAVIES, son of the late John Davies, chemist, Mansell Street, Swansea, was on Friday, April 21, elected to a scholarship in the Royal Masonic Institution for Boys. He polled 4,277 votes.

MR. NATHAN G. BECK, chemist and druggist, has been elected vice-chairman of the Burgess Hill (Sussex) Urban District Council. Mr. Beck has also been reappointed Rector's warden at the local parish church.

MR. A. MACKINTOSH STEWART, F.C.S., Managing Director of the Dispensary, Ltd., chemists and opticians, Penang, S.S., and Mrs. Stewart are coming home on a visit, and expect to be in London in time for the Coronation.

MR. FRED LUNTON, the representative of Messrs. James Townsend & Sons, chemists' printers, of London and Exeter, in the West of England and South Wales and Channel Islands, has had a paralytic stroke while on his journey at Cardiff.

COUNCILLOR L. B. ROWLAND, chemist and druggist, 9 High Street, Wrexham, has been appointed representative of Wrexham Education Committee on the Higher Education Joint Committee, and manager of the Evening Classes and Science and Art School.

MR. DANIEL ARNOTT, Ph.C., 36 Taff Street, Pontypridd, was on April 25 unanimously elected Chairman of the local Urban Council. He was first elected to the Council in 1903. Mr. Arnott, who is a native of Pontypridd, has been in business as a chemist there since 1897. He takes a special interest in education, and was Chairman of the local Education Committee two years ago.

MR. W. C. ANDERSON, Chairman of the Independent Labour Party, who presided at the recent annual meetings of that body in Birmingham, served his apprenticeship as a chemist, and was for some time a chemist's assistant. Mr. Anderson is a North of Scotland man, and attended the University of Aberdeen for some time with a view to qualifying for the ministry, but owing to his health giving way he returned to pharmacy. Whilst assistant with the late John Macmillan, Glasgow, he was appointed to a position in the organising department of the National Shop Assistants' Union, and about half a dozen years ago he again left pharmacy, and has since devoted all his time to social politics. A fluent speaker, and a man with ideas and vim, he has rapidly risen in the Socialistic ranks to be Chairman of the party.

MR. REGINALD R. BENNETT, B.Sc., F.I.C., pharmacist and lecturer in pharmacy to University College Hospital, London, has passed the Final examination of the Council of Legal Education, and will in due course be called to the bar as a student of Gray's Inn. Mr. Bennett has had a distinguished career in pharmacy since he was awarded the Pharmaceutical Society's herbarium silver medal in 1899. He entered the School of Pharmacy in the 1900-1 session, and took three bronze medals at the end of the session, following up this achievement by passing the Minor examination in July 1901. Continuing at the school during the 1901-2 session he secured the silver medals in advanced botany and materia medica, and passed the Major Examination in April 1902, subsequently being awarded the bronze medal in the Pereira Examination. He succeeded the late Mr. Harold Wilson as pharmacist at University College, and is the author of a pharmaceutical Latin grammar.

MR. GEORGE WEDDELL, who has (not for the first time) been nominated to the presidency of the Newcastle-on-



MR. GEORGE WEDDELL.

Tyne Pharmaceutical Association, is one of the best-known pharmacists in the North of England, and one of the most successful business men in his city. He served his apprenticeship in Kelso, and it is thirty-five years since he became a full-fledged pharmacist. He had cosmopolitan experience before settling down in Newcastle as Sir Joseph Swan's right-hand man in Mawson & Swan's pharmacy, and the business ultimately became his own—Mawson, Swan & Weddell. He is also the founder

of a deep interest in the Citizens' Guild of Help (Elberfeld system), and is chairman of the movement at the east end of Newcastle, making a feature of utilising his lifelong study of sociology, eugenics, etc. His literary ability has enabled him to infuse great interest into his workers, besides giving pleasure to a large circle of friends who are familiar with his poetic fancies. His more prosaic efforts have included "How Do I Stand?" and "Arcana Fairfaxiana."

MR. ARTHUR H. WARDLE, Ph.C., formerly of Maidenhead, and now of Nairobi and Mombasa, British East Africa, has arrived in London with Mrs. Wardle, on a short holiday. Mr. Wardle is an old "Square" man, and went out to the Protectorate fully six years ago as medical storekeeper to the Government. After some years' experience in this position he resigned, and embarked upon an interesting experiment in drug-cultivation, having taken for the purpose a farm of 240 acres. He was exceptionally successful with his belladonna, which he found to be as rich in alkaloids as the European-grown drug. Owing to the difficulty in obtaining a sufficient supply of labour and for other reasons, the drug-cultivation had to be abandoned, and Mr. Wardle then turned his attention to cereals and considerably extended his farm-land. In September 1908 he opened the Nairobi Pharmacy, in Government Road, Nairobi, and since then has opened a branch at Mombasa, and has now a third in Zanzibar. His ventures have been successful, and one of the principal objects of his visit home is to purchase a complete soda-water plant for a factory which is to be established in Nairobi by a company of which he is one of the largest shareholders and a director. Mr. Wardle speaks favourably of the future of the Protectorate, especially in its agricultural interests, but it will take many years before there is much opening for general trade. We had a conversation with him in regard to the new Drugs and Poisons Ordinance which replaces the 1902 one. It took effect in September last, certain provisions, however, being suspended until September of the present year. Under the old Ordinance any person could sell poisons by wholesale and retail and dispense them, but the new Ordinance requires that all who carry on the business shall be examined and licensed. A Board of Examiners has been appointed, consisting of the Principal Medical Officer of the Protectorate and four other medical practitioners and one pharmacist, Mr. Wardle being the first appointed as the pharmaceutical member of the Board. It is provided in the Ordinance that a pharmacist holding the qualification of the Pharmaceutical Society of Great Britain or of Ireland may be registered under the Act, while pharmacists holding certificates or diplomas from any Board of Pharmacy in the British Colonies may also be registered if the Board is satisfied with the qualification. The examination provided under the Ordinance is not very advanced, and will consist chiefly in ascertaining the candidate's knowledge of chemicals and drugs used medicinally, the methods of preparing them, and their properties and uses, but it is not intended to require botanical knowledge or intimate knowledge of the laws and principles of chemistry. So far no candidates have been examined. A number of Goanese druggists carry on business in the Protectorate without qualification, and it will be necessary for them to qualify before September, otherwise they may have to stop business. We gave other particulars about the Ordinance in our issue of August 13, 1910.

## WILLS PROVEN.

MR. GEORGE ARTHUR BATTY, 155 London Road, Croydon, chemist and druggist, who died March 22, left estate valued at 572l. 3s. gross, with net personalty 384l. 2s. 9d.

MR. THOMAS NABSET, The Oaks, Sunderland, chemist and druggist, who died February 26, left estate valued at 1,078l. 19s. 2d. gross, with net personalty 157l. 14s. 4d.

DURING 1910 the imports of chemicals, drugs, and perfumes into Coquimbo, Chile, amounted in value to 590l., as compared with 3,360l. in 1909 and 3,135l. in 1908.

of the international table-salt business carried on by Cerebos, Ltd., and it is to his keen management that the present fine position of that concern is due. He has taken

## TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., April 27.

THE general tone in the drug and produce market remains quiet, but in heavy chemicals the demand is well maintained. The chief alteration since last week is a reduction of 5s. in quicksilver and a decline of 1d. per lb. in mercurials. Opium is still tending upwards, very high prices having been paid in Smyrna. It is expected that a further 2s. 6d. will be added to the price of santonin ere long. Menthol is firmer and in more inquiry. Buchu leaves are 3d. per lb. higher, closing with a "bullish" tone, and the demand for ergot has improved. Jalap is quiet, and wahoo bark dearer. Bergamot, lemon and orange oils are all firmer. The principal changes are as under:

Higher	Firmer	Easier	Lower
Buchu (round) Coconut oil Pepper Pimento Wahoo bark of root	Bergamot oil Cream of tartar Lemon oil Menthol Orange oil	Ammonia sulphate Turpentine	Mercurials Nutmegs Quicksilver

### Cablegrams.

BERGEN, April 26.—The cod-fishing at Finmarken shows partly good results, but the weather is stormy. No business has transpired, and the market is lower at 150s. per barrel c.i.f. terms.

NEW YORK, April 27.—Business in drugs is quiet. Opium is dull at \$5.50 per lb. for druggists'. Hydrastis (golden seal) is firmer at \$3. Jalap is lower at 35c. Copaiba is steady at 42c. for Central and South American. Canada balsam is lower at \$4.15 per gallon. Mexican sarsaparilla is scarce and dearer at 17c. Peppermint oil is quiet and unchanged at \$2.85.

### London Markets.

ALOES.—The *Kildonan Castle* has brought fifty-five packages from Moesel Bay. There should be a fair quantity of this description on offer next week, judging by recent arrivals. Six cases of Zanzibar skin aloes, part very fine, have just arrived, and will be offered next week.

The exports from Cape Colony during February amounted to 78,369 lb., valued at 776l., against 70,267 lb., valued at 318l., during 1910; during the two months the exports were 154,275 lb., against 138,943 lb.

AMMONIA SULPHATE is easier. Grey 25 per cent. London prompt is quoted 13l. to 13l. 2s. 6d. net; Hull prompt 3l. 12s. 6d. to 13l. 13s. 9d.; Leith prompt 13l. 17s. 6d.; Liverpool prompt 13l. 15s.; Beckton 25 per cent., May-June, 13l. 5s.

ANISEED has been sold recently at 24s. 6d. to 25s. per wt. for fair Russian on the spot.

ARROWROOT.—The sales privately comprise about 300 barrels St. Vincent at from 2d. to 2½d. per lb., being unaltered. At auction 13 cases Madagascar were bought in at 10d. per lb.

BENZOLIN.—Some eighty cases of Sumatra have arrived at the warehouse during the interval.

BENZOLS.—Casks are quoted at 9d. per gal. for 50 per cent. and 9d. for 90 per cent.

BERGAMOT OIL is dearer at from 17s. to 17s. 2d. per lb. c.i.f.

BROMIDES remain firm on the basis of 1s. 3½d. per lb. for potassium in 1 cwt. lots, no contracts being booked for forward delivery. Second-hand is obtainable at a trifle less—say 1s. 3¼d., but there is no pressure to sell.

BUCHU-LEAVES are 3d. per lb. higher, about thirty bales having been sold mostly for export at up to 4s. per lb. for short-broad green. Ovals are quoted at from 1s. 9d. to 2s., and longs, which are scarce, at 1s. 6d. per lb. The Cape market remains very firm, and stands at a higher parity than that of London, and with decreased shipments this year, as shown by the figures given below, the market is bullish. The *Kildonan Castle* has brought twenty packages from Cape Town, of which seven bales are round (in transit), eleven bales ovals, and two bales longs, for London. The exports from the Cape during February amounted to 39,237 lb. (6011l.) against 59,976 lb. (4616l.) in February, 1910; for the two months (January-February) the shipments are 55,213 lb. (7949l.), against 86,945 lb. (6578l.) during 1910. The foregoing figures show that the shipments so far this year are 31,732 lb. less than at the corresponding period of 1910.

CALUMBA.—The arrivals comprise 155 bags direct from Mozambique, also 75 bags *via* Hamburg.

CANARY-SEED.—A small business is reported at fairly steady prices, common Morocco at 41s. to 43s., fair to good 44s. to 47s. 6d., and fine at 52s. per quarter; Turkish is quoted 44s. to 45s., and Spanish 65s. to 75s. for good to fine.

CANNABIS INDICA.—Sales of East African tops have been made at 1s. 6d. per lb.

CAPSICUMS quiet. Of 431 bags offered at auction, 120 sold, comprising 20 large picked red Japan at 37s.; about 100 bags Bombay on stalk had been sold privately, the remainder being bought in at from 33s. to 35s. per cwt.

CARAWAY-SEED is firm at 24s. per cwt. for good Dutch on the spot.

CARBOLIC ACID.—Quiet. Crystals, 39° to 40° C., are quoted at 5d. per lb., and 34° to 35° C. at 4½d. per lb. nominally. Crude, 60°, East Coast, is 1s. 7d. to 1s. 8d., and West Coast 1s. 6½d. to 1s. 7d. per gal. nominally.

CASCARA SAGRADA.—Advices from the U.S.A. continue strong, and for shipment 40s. per cwt. c.i.f. is asked. A fair quantity has been sold on the spot at from 38s. to 39s. per cwt.

CASTOR OIL.—Quiet. Hull make of first pressing for May-June delivery is quoted at 29l. 10s. and July-December at 28l. per ton in barrels, delivered free on wharf, London; pharmaceutical quality is quoted 50s. per ton over the price of firsts, and oil in tins and cases 50s. per ton over the price in barrels. Belgian firsts for April delivery is quoted 31l. 10s. and May-December at 27l. 15s. per ton, barrels free, ex wharf, London. In Liverpool good seconds Calcutta is steady at 3½d. per lb. for spot, 3¾d. to 3½d. for forward, and 3¾d. for May-June.

CHILLIES steady. At auction 24 bags fair Beira sold at 46s. 6d., and 200 bags Mombasa were bought in at 45s. per cwt. for ordinary.

CINCHONA.—At the London auction on Tuesday 425 packages were offered, of which the larger proportion sold, the previous average unit of ¾d. per lb. being barely maintained. Of East Indian 237 packages offered and sold comprising Ledgeriana natural stem chips at from 3½d. to 3¾d., and branch at 2¾d. Hybrid, natural stem chips at 2¾d., branch at 1¾d., and root at 2d. Succirubra, natural stem chips, 1½d., to 1¾d., renewed ditto at 1¾d. Officialis, broken quill at 2¾d. to 3d., natural quilly chips 1¾d. to 2¾d., spoke shavings 2½d., and root at 3½d. per lb. At the auction to be held at Amsterdam on May 4, 8,444 bales and 456 cases, weighing about 796,188 kilos, and containing the equivalent of 45,360 kilos. quinine sulphate, will be offered. The

total weight of the manufacturing bark is 682,689 kilos., containing the equivalent of about 41,556 kilos., while the pharmaceutical bark weighs 113,499 kilos, and contains 3804 kilos. quinine. The average percentage of quinine in the manufacturing bark is 6.09, against 6.30 in March.

**CLOVES.**—Nothing was offered at auction. Privately Zanzibar are quiet, but firm. March-May delivery is quoted buyers at  $7\frac{3}{4}d.$ , and June-August has been sold at  $7\frac{3}{4}d.$  to  $7\frac{7}{8}d.$ ; for arrival, August-October shipment sellers quote  $6\frac{1}{2}d.$ , and October-December at  $5\frac{3}{4}d.$  c.i.f. d/w., being easier. On the spot fair Zanzibar are offered at  $7\frac{3}{4}d.$  per lb.

**COCA-LEAVES.**—At the Amsterdam auction on May 4, 667 packages, weighing about 36,874 kilos., will be offered.

**COCONUT OIL** is dearer at 36s. per cwt. for Ceylon on the spot, 34s. for April-June, and 33s. 9d. for May-July. Cochin is quoted 40s., April-June 35s. 6d., and August-September 35s. 6d. c.i.f.

**COD-LIVER OIL.**—According to cabled statistics received from Norway, the catch and output of cod-liver oil up to April 22, as compared with the preceding period of 1910, is as follows:

		Catch of Cod.	Livers for Raw Oil (hect.)	Yield of c.l.o. (hect.)
Lofoten ...	1911...	10,500,000	706	7,862
" ...	1910...	13,900,000	1,970	13,457
Whole Country ...	1911...	34,900,000	5,360	24,164
" ...	1910...	36,700,000	11,318	29,774

The market remains very quiet, without anything new to report.

Our Bergen correspondent writes on April 24: The Lofoten codfishery is now closed. To-day's report give the following numbers for the Lofoten-fishing:

	1938	1909	1910	1911
Catch of cod (millions) ...	13.3	16.8	13.9	10.5
Yield of c.l.o. (hect.) ...	20,100	20,000	13,500	7,850
Liver for "raw" oils (hect.)	2,860	2,575	1,970	7.60

and for the whole country:

	1908	1909	1910	1911
Catch of cod (millions) ...	35.4	40.8	36.7	34.9
Yield of c.l.o. (hect.) ...	48,000	41,900	29,700	24,170
Liver for "raw" oils (hect.)	13,700	15,100	11,300	5,350

At Finnmarken the codfishing is now in full swing and the results are partly fair, although the catch in this district is far behind that of the foregoing years at the corresponding date. The market tendency is very quiet and prices are still falling. Finest new non-congealing oil cannot be quoted above 150s. per barrel, but there has not been any business done for several days. Agents in London report the market as very quiet, the range of quotations being from 148s. to 155s. per barrel c.i.f. as to brand, and old oil 140s. is quoted. The season so far has been disappointing all round, the rapid advance soon after the beginning of the fishing having frightened buyers, so that purchases so far have mostly been for current requirements, and not until the autumn is there likely to be any important buying.

**CORIANDER-SEED** is in small supply, and prices are firm at 18s. to 19s. per cwt. for common to good Morocco; Russian is quoted 16s., with some business doing at the price.

**CREAM OF TARTAR.**—Crude material is advancing in consequence of a greater shortage than anticipated, and with more demand for cream of tartar prices are firmer, but unaltered, at 95s. per cwt. for 98 per cent. and 93s. for 95 per cent.

**CUBEBS** have been selling at from 6l. 5s. to 6l. 10s. per cwt., but no genuine are now obtainable under 7l.

**CUMIN-SEED** is slow of sale at 30s. per cwt. for Morocco; the quotation for Malta is 35s. per cwt.

**DRAGON'S BLOOD.**—No arrivals have taken place; prices remain firm.

**ERGOT.**—The demand has improved and the tone is firmer, with sales of Russian at from 3s. 6d. to 3s. 8d. per lb., and for fine Spanish up to 4s. 3d. spot has been paid in a retail way. Spot supplies remain extremely scarce. There is a parcel of Russian of doubtful quality on the market, the lot in question having apparently been

partially exhausted, the ergot being black and brittle, so that buyers should be on the alert.

**FENUGREEK-SEED** is quiet at 8s. to 8s. 6d. per cwt. for weathered Morocco and 9s. 6d. to 10s. 6d. for fair to good.

**GAMBOGE.**—Since the last auction 13 cases fair Siam pipe have arrived in the warehouse.

**GENTIAN** is steady at 22s. 6d. per cwt., which price could be shaded 6d. for quantity.

**GINGER.**—At auction a large quantity offered, including 816 bags, of which 80 bags smallish washed Cochin sold at 41s. 6d. to 42s.; 12 cases selected bold scraped Calicut were bought in at 90s.; of 352 bags China (Liberian character), ten sold without reserve at 30s.; 102 bags Japanese were bought in at 48s., and 30 bags Sierra Leone at 38s. per cwt.

**GUINEA GRAINS** are offered from Hamburg at 92s. 6d. per cwt c.i.f., and on the spot 102s. 6d. to 105s. is asked.

**IPECACUANHA.**—The arrivals comprise ten bales of Matto Grosso, and a few bales of Cartagena. The stock in the warehouse on April 27 consisted of 41 Matto Grosso, 32 Minas, 29 East Indian, and 50 Cartagena, or 132 packages in all. Market is quiet, pending the next week's auctions.

**ISINGLASS.**—At auction Brazil and West Indian sold steadily. Penang was in larger supply and 2d. to 4d. lower; leaf irregular to 3d. lower and purse 1d. to 2d. lower. Long Saigon leaf was much higher, round leaf 4d. to 6d. lower. Bombay steady and bladder pipe cheaper.

**JALAP** testing 9 per cent. resin is quoted 1s. 4d. per lb. on the spot, and business in 9 per cent. has been done to Hamburg at 1s. 5d.

**LEMON OIL** is firmer, several agents asking from 4s. 7d. to 4s. 9d. per lb. c.i.f. London. Previous advices in regard to the unfavourable weather conditions have been confirmed.

**LIME CITRATE.**—The exports from British Guiana from January 1 to March 30, 1911, were nil, as compared with 7892 lb. in the corresponding period of 1910.

**LIME OIL.**—A small business is passing at from 1s. 3d. to 1s. 4d. per lb. for West Indian distilled. Hand-pressed is nominal at 5s.

**LINSEED** is steady for fine quality at about 75s. per quarter.

**MENTHOL** has been the subject of more inquiry, and with quiet buying, all the cheap parcels on offer appear to have been absorbed. Sales of Kobayashi have been made at 15s. 6d. to 15s. 9d. spot, but nothing is now obtainable under 16s. The first-hand price from Japan remains at 18s. c.i.f., but second-hand sellers quote 15s. 6d. c.i.f., with buyers at 15s. The *Portia*, from Hamburg, has brought 50 cases.

**MERCURIALS.**—The makers announce a decline of 1d. per lb. following on the reduction of 5s. in quicksilver. The current prices for assorted lots of under 2 cwt. are as follows:—White precipitate 3s. 5½d., corrosive sublimate 2s. 10d., calomel 3s. 2d., red precipitate 3s. 5½d., yellow oxide B.P. 3s. 8d., white sulphate 2s. 10d., and sulphuret with sulphur 2s. 10d. per lb.

**MORPHINE.**—The makers continue to quote 8s. per oz. for hydrochlor. powder in bottom quantities.

**OPIUM.**—The market remains very firm, the lowest spot price for good Smyrna druggists' being 16s. per lb., but sellers are few. In Smyrna the equivalent of 16s. has been paid, but there is no more to be had at this price.

A Smyrna correspondent writes on April 14 that the sales this week amount to 18 cases, at from 15s. to 15s. 6d. for low-grade qualities and 17s. for extra-selected Karabissar. Only 8 cases were for export, the balance being for interior and local speculators. The arrival to date amount to 4,473 cases, against 1,926 cases at the same date last year.

In the course of the March issue of the "Quarterly Trade Journal" of the British Chamber of Commerce of Turkey it is stated that it is quite impossible to estimate to what extent the plants in Asia Minor have suffered from frost and snow. Salonica, strange to say, has had a different experience. There has been no snow and little rain during the past two months. Most of the time when Asia Minor was experiencing severe cold the weather was mild all over the Salonica district, but early in February severe frosts set

in, and the bulk of the opium crop is reported to have been destroyed. It is impossible to give any views as to the approximate yield for the coming season, but everything points to a very short crop. The bulk of the autumn plants has been destroyed, and there appears to be no chance of any spring seed being put underground for another fortnight at least, as it will take fully that time for the snow to melt and the ground to be in a fit condition for ploughing. Peasants will have a very limited time in which to sow 50 per cent. of their wheat crop, all the barley crop, and practically all the opium.

Writing on April 22, a Smyrna correspondent states that the sales amount to 10 cases, of which 5 cases extra Karahissar at pts.160, or 17s. 6d., per lb. c.i.f. were for speculators and 5 cases of secondary quality for export at pts.148, or 16s. 4d. The arrivals amount to 4,477, against 1,938 cases last year.

**ORANGE OIL.**—With small supplies on offer, Messina shippers are very firm, quoting 6s. 3d. per lb. c.i.f. for sweet.

**ORRIS.**—Further sales of ordinary Mogador have been made at 32s. 6d. per cwt.

**PEPPER (BLACK).**—At auction ten bags good heavy Ceylon were bought in at 5½d. per lb. Privately the market for Singapore is steady but quiet, fair offering at 4½d. spot, with sales of May-July and June-August shipment at 4¾d. c.i.f. d/w. Lampong is dearer, the sales including October-December steamer at 4¾d. to 4¾d., January-March and February-April at 4¾d. to 4¾d. c.i.f. d/w.

**PEPPER (WHITE).**—At auction 71 bags Singapore were bought in at 7d. for dullish. Privately the market is quiet but steady, fair Singapore offering on the spot at 7d.; for arrival, there are sellers of April-June shipment at 6½d. June-August sellers at 6½d. c.i.f.

**PEPPERMINT OIL** is quiet at from 12s. 3d. to 12s. 6d. for Wayne County oil in tins, and at 14s. 9d. for H.G.H.

**PIMENTO.**—At auction 86 bags, barely fair, were bought in at 2¾d. per lb. Sellers of August-September shipment quote 21s. per cwt. c.i.f.

**PODOPHYLLUM ROOT** is quoted at 31s. 6d. per cwt. on the spot.

**QUICKSILVER.**—The official quotation was reduced by 5s. per bottle on Monday to 9l., and seconds holders now offer at 8l. 8s. Mercurials are 1d. per lb. cheaper.

**QUININE.**—At the auction held at Amsterdam on April 21, 1,417½ kilos (50,000 oz.) Ed. II. were offered and sold at the average price of fl. 10.12 per kilo, against fl. 10.01 at the previous auction, showing a firmer tone. The next auction will be held on May 12, and will consist of 50,000 oz. The exports of "quinine, quinine salts and combinations" from Germany during the two months ended February was as follows:

	1909	1910	1911
Kilos. ...	23,300	39,200	24,200
Marks ...	559,000	902,000	665,000

**SANTONIN.**—A report is current that the convention is to advance the price a further 2s. 6d. per lb. ere long.

**SARSAPARILLA.**—At auction next week the offerings will include 22 bales fair genuine fibrous grey Jamaica, and 36 bales Lima-Jamaica, of full average quality. Mexican is dearer at 7d. c.i.f.

**SENEGA** is steady, spot holders asking 1s. 10d. per lb. et.

**SHELLAC** is steady, but quiet. On the spot small sales have been made on a basis of 71s. per cwt. for fair TN range; for arrival April-June shipment, sellers quote 70s. per cwt. c.i.f., and AC Garnet for October-December shipment at 67s. c.i.f. Futures close firmer, the sales including May delivery at 71s. to 71s. 6d., and sellers and August at 3s. 6d. and value.

**TANGERINE OIL** is extremely scarce at from 37s. to 39s. er lb.

**TURPENTINE** has shown an easier feeling, prices having exceeded about 2s. per cwt. on the week, closing flat at 5s. 6d. on the spot.

**WAHOO BARK OF ROOT** is much dearer, 2s. per lb. spot being asked, in consequence of a dearer New York market.

## Manchester Chemical-market.

April 25.

There is a very steady feeling in all classes of chemicals, and it is expected that there will be a large increase in exports during this month as compared with those of April 1910. The manufacturers still complain of low prices leaving little margin of profit, but they have evidently stimulated business to a considerable extent. This is especially the case with caustic soda. For delivery in Lancashire and Yorkshire, 70 per cent. to 72 per cent. in 5-ton truck-loads is quoted at from 9l. 10s. to 9l. 15s. per ton net. Spot demand for carbonate of potash is well maintained, and values of German are from 16l. 10s. to 17l. f.o.b. Hamburg, and Russian 16l. 10s. to 17l. ex store Manchester and Liverpool, all net. Caustic potash, liquid electrolytic, in loan drums, is quiet at 11l. 2s. 6d. per ton ex quay Hull or Goole. American brown acetate of lime keeps on the low side at about 6l. 10s. per ton c.i.f. White powdered arsenic is a shade steadier. Sulphate of copper continues in strong demand for export, and premiums are paid for the best brands for prompt delivery; forward prices also show an upward tendency. Prices of farina are very firm, and the large increase in quotations for potatoes has naturally strengthened the position a good deal. Both in Holland and Germany stocks are rapidly becoming reduced, and, as already intimated, we anticipate an advance in the early future. Meantime, business is doing in superior German on spot, 11l. 12s. 6d. to 11l. 15s. ex store Manchester, and for shipment 10l. 12s. 6d. to 10l. 15s. f.o.b. Stettin; superior Dutch, 11l. 10s. to 11l. 15s. f.o.r. Goole or Manchester, or 11l. f.a.s. Delfzyl. "Seconds," 9l. 17s. 6d. f.o.b. Harlingen, or 10l. 5s. f.o.r. Goole, all net cash. Glycerin remains very steady, and there are no changes of material importance to note. The demand for refined is good, distillers being well occupied with orders for some little time ahead; crude is not freely offered, and the value is nominal. The demand for castor oil continues rather quiet; the general tone, however, is firm, and prices may possibly go higher. Spot supplies are scarce, and crushers are behind with deliveries. English, first pressing, May delivery, 30l. 10s.; June, 23l. 15s. f.o.r. Hull, less 2½ per cent., barrels free; seconds, 1l. per ton less; French, first pressing, 31l. 15s.; seconds, 30l. f.o.b. Marseilles, barrels included, less 1¼ per cent.; good seconds Calcutta (B.I.O.M. make), 3½d. to 3½d. ex quay Liverpool, less 2½ per cent. delivery over all 1911. Italian green olive oil soap is still in short supply on the spot; 56 to 58 per cent. in bars, to arrive, 22l. 10s. per ton c.i.f. Liverpool, and other grades at proportionate prices. Greases rule lower. Quotations for brown bone are from 28s. to 29s.; white bone, 29s. 6d. to 30s.; marrowfat, 30s. 6d. to 31s. 6d.; brown and white skin not offering—all at makers' works or landing port, less 2½ per cent. Coal-tar products show little or no change.

## Heavy Chemicals.

Business in the heavy-chemical market has now assumed more normal proportions after the slackness of holiday-tide, and the volume of trade passing both on home and export account is very satisfactory. This not only applies to new business, but also refers to deliveries against existing contracts. Values all round keep on the steady side.

**ALKALI PRODUCE.**—Bleaching-powder, caustic soda, and ammonia alkali are especially active in this branch just at present. Soda crystals show an improvement, and saltcake is steady. Chlorates and prussiates are rather on the quiet side.

**SULPHATE OF AMMONIA** is dull and late figures have scarcely been maintained. Present nearest are: Beckton, 25 per cent. ammonia, guaranteed, May-June, 13l. 5s.; London terms, 13l. to 13l. 2s. 6d.; Leith, 13l. 17s. 6d.; Liverpool, 13l. 15s.; and Hull, 13l. 12s. 6d. to 13l. 13s. 9d. More attention is being paid to far-forward delivery, and present basis seems to be from 5s. to 7s. 6d. per ton less than prompt prices.

**ALUMINA PRODUCTS.**—A fair activity prevails here, though it is more especially against existing contracts. Crystal alum lump, 5l. 5s. to 5l. 15s.; lump in tins, 5l. 10s. to 6l.; and ground, in bags, 5l. 15s. to 6l. 5s. per ton free on rails Lancashire or Yorkshire, or f.o.b. Hull, Goole, or Liverpool. Sulphate of alumina, purest qualities, practically free of iron, ordinary strength quality, 4l. 12s. 6d. to 5l. 2s. 6d. per ton, in casks, with customary allowances for bags and loose slabs, and usual extras for similar pure quality in higher concentrations. Aluminous cake, 50s. to 57s. 6d. Aluminoferric, 50s. to 57s. 6d., according to quality, quantity, and destination. Hydrate of alumina, purest quality and high strength Al<sub>2</sub>O<sub>3</sub>, 12l. 10s. to 13l. 10s. per ton free on rails in large casks. Aluminate of soda, purest quality and high strength Al<sub>2</sub>O<sub>3</sub>, 27s. 6d. to 30s. per cwt. Carbonate of alumina, 30s. to 32s. 6d. per cwt.

## Continental Drug and Chemical Markets.

**AMYL PREPS.**—A further advance of m.10 per 100 kilos. has been determined on by the Convention. These products

are now approximately m.100 per 100 kilos, in excess of the price ruling at this time last year. Amylic alcohol is now quoted at from m.305 to m.325, and amylacetate at from m.285 to m.305 per 100 kilos.

**CARNAUBA WAX.**—Owing to the arrival of considerable supplies there is a greater tendency to realise, and prices are slowly falling, with consumers confining themselves to covering their actual needs. Fatty grey and current grey is quoted m.300 per 100 kilos. Supplies of yellow qualities have been received, and prices are unchanged.

**CITRIC ACID** is quiet. The transactions which have taken place for some time past refer to small quantities for immediate needs. It is probable that the summer demand will create a firmer situation.

**QUILLAIA.**—Cut drug should be quoted higher owing to the position of whole; present competition, however, does not admit of this, and no alteration is to be expected for the time being. Much indifferent quality is on the market.

**ZINC OXIDE.**—A decline took place in February and March, and the present situation has since been dull. Quite recently, however, owing to a change in the metal, the tendency has improved. Much zinc has been dealt in, and the syndicate has raised its prices. It is probable that the zinc-oxide convention will be obliged to follow suit.

### Linseed-oil Outlook.

Rather excited markets have again been experienced in sympathy with movements in the raw material, which is not to be wondered at in view of the uncertainty as regards prospective supplies and the fact that crushers everywhere are still very short. Fluctuations in spot oil, which is very scarce, have not been particularly wide just lately compared with the sharp ups and downs in the quotations for delivery in the last four months of the year, in which speculation has run wild. The London price for spot pipes is now in the neighbourhood of 45/- per ton, or about 4/- 10/- under the highest record ever touched, this quotation showing a premium of about 5/- over May-August, and over 7/- per ton over September-December contracts. Estimates of this year's exportable surplus of linseed from the River Plate are still very conflicting, though they have been further reduced by most authorities. Commercial estimates now generally place the export surplus for this year at only 350,000 tons, which is much under the Government estimate and some 150,000 tons less than actually exported last year. The European market is now chiefly dependent on the arrivals from India, which should be on a more liberal scale in the next month or two, while the receipts from the Argentine are restricted. It remains to be seen how far market conditions will be affected by the larger clearances expected of Indian seed, although this is much wanted. The total receipts in Great Britain for the first quarter were only 30,000 tons, compared with 51,000 tons and 94,000 tons for the corresponding period of the previous two years, whereas the exports of linseed-oil, despite the high prices, have run into as much as 6,000 tons, compared with 4,754 tons and 5,517 tons for the first quarter of 1910 and 1909 respectively. This increase has not been made good by the imports, which this year amounted to 9,154 tons, against 12,950 tons last season and only 4,905 tons two years ago. As may be gathered from the much-reduced receipts of raw material, the increased exports combined with the smaller imports of oil leave the reserve supplies of oil very small. These facts would seem to lend colour to the theory that the present high range of values is justified, while the United States has already this year absorbed 30 per cent. more seed direct from the River Plate and India than last year. Allowance, however, has to be made for the restricted consumption through abnormally high prices. One authority states that the two most depressing factors in linseed oil are the large use of substitutes, of the re-selling of oil by some of the paint manufacturers who had contracted for supplies for several months ahead. It is stated that substitutes for linseed oil are being used much more largely than has been hitherto known. American crushers are hopeful as to the crop outlook. Soil conditions are good for seeding purposes, although sowing has not yet begun. A sufficient supply of seed has been secured by farmers for sowing, and adequate financial assistance has been secured by the latter.

**DURING** the month of January drugs, chemicals, and apothecaries' wares valued at 82,000/- were imported into British South Africa, as against 67,000/- in January 1910.

**NEW ZEALAND BEESWAX.**—In giving advice to New Zealand shippers, the Produce Commissioner in London states that beeswax should be shipped in small cakes of about 5 lb. or 6 lb. weight, this being preferred to larger sizes. It should be properly graded, and packed in neat cases containing about 1 cwt. each. Beeswax is preferred by buyers in its natural state; if refined, there is often a suspicion that it has been adulterated.

## POISONING FATALITIES.

SIXTEEN deaths from poisoning have been reported during the week. Of these six were due to misadventure.

**Aconite, Belladonna, and Chloroform Liniment** was the agent used for suicidal purposes by Annie Hodgkiss (61), at Fratton.

**Cantharides.**—At the inquest on Elizabeth E. Goldthorpe (29), the wife of a Tottenham painter, it was stated that an analysis showed the presence of cantharidine in the body, while the medical opinion was that death was due to poisoning by cantharides or one of its preparations. Detective-Inspector Bedford said that he had made careful inquiries at chemists' and drug-stores, but had been unable to trace any purchase of cantharides. He had been told that tincture of cantharides was sold by chemists in small quantities, and also that it was sold in some cases by hairdressers as a preparation for the hair. The Coroner remarked that that was a matter that required to be looked into, as it was illegal for other than chemists to sell the tincture. Inspector Bedford said he had made careful inquiries, but had been unable to implicate anyone. The jury returned a verdict in accordance with the medical evidence, adding that there was no evidence to show how the poison was administered.

**Carbolic Acid.**—The suicidal death at Chertsey of Chas. F. Iremonger, stockbroker, was due to this poison.

**Chloroform.**—Delayed chloroform-poisoning caused the deaths of Thos. F. Forster (5), of Tottenham, and Janie Chandler (5), both of whom died after being operated upon under chloroform for the removal of tonsils and adenoids. Death resulted in two and three days respectively afterwards. Dr. B. H. Spillsbury said the explanation of the deaths was fatty degeneration of the liver, a condition the existence of which it was not possible to suspect.

**Methylated-spirit Poisoning** caused the accidental death of Elizabeth J. West (53), clergyman's widow, Muswell Hill.

**Morphine.**—At the inquiry into the death of Mr. Alan McConnal, chemist, who died at the Holderness Hotel, Beverley, from morphine-poisoning, the jury returned a verdict of "Suicide, with no evidence as to the state of deceased's mind." Chief Constable Knight said deceased apparently returned to Beverley, which he left in 1908, to be interred with his first wife, whom he lost five years ago.

**Nitric Acid.**—Elizabeth Murray (51) killed herself at Kensington by taking this poison while in a drunken condition.—This poison was also used for self-destruction by Ellen Percival (44), Grantham. At the inquest, deceased's son said he kept a small bottle of aqua fortis on the kitchen mantelpiece for marking his tools.

**Oxalic Acid** was responsible for the self-inflicted death of Henry Randall (55), cabman, Aldershot.

**Prussic Acid.**—A verdict of "suicide by poisoning himself with prussic acid while in an unsound state of mind produced by ill-health and prolonged hours of duty" was returned at the inquiry held at Wroxall, Isle of Wight, into the death of Sergeant Ethelbert Robert Stokes, R.A.M.C., dispenser at Parkhurst Barracks, whose body was found in a cave between Shanklin and Wroxall. The jury suggested that representations should be made to the War Office with a view to an inquiry being instituted as to the conditions of employment of the medical staff at Parkhurst. The Coroner said that this was the second suicide of a hospital sergeant within nine months. It was stated that some of the members of the staff were on duty over a hundred hours a week.

**Sal Volatile** taken in accidental overdose caused the death of Eleanor A. Pearce at Gloucester. It was estimated that deceased had taken about an ounce dose.

**Soldiering-fluid**, taken in mistake for quinine tonic, killed a Whitehaven collier named Wm. Fitzimmons (33).

**Strychnine** was taken with suicidal intent by Annie Perry (28), housekeeper, Longtown, and Frank Frankson, fireman, Neath. At the inquest on the latter, Mr. R. L. Griffith, chemist, employed by Mr. W. G. Hibbert, Ph.C., New Street Square, Neath, said he sold deceased, who said he wanted to get rid of a dog, 20 grains of strychnine for 1s. He refused to sell the poison until Frankson brought someone personally known to him. Both signed the poisons register.—At Castle Hedingham, Thomas Westrop used the same poison for suicidal purposes. Mr. Herbert Jenkins, chemist, Braintree, in his evidence at the inquest, said that he identified the packet as one sold at his pharmacy; the handwriting on the label was his. The packet was composed of about a drachm of strychnine, mixed with blue for safety, and contained other ingredients to increase the bulk. The poison was purchased on June 20 by a man named Smith, whom witness recognised as a customer. The reason given for the purchase was "rats." George Smith deposed that he bought the packet at the request of a Mr. Kendall, but he knew it was for deceased.

**Weedicide.**—At Ilfracombe, Laura Ann Morgan (58) intentionally ended her life by taking some poisonous weedicide.

## An Analytical Note.

### Separation of Chromium, Iron, and Aluminium by means of Ammonium Persulphate.

By R. C. Cowley, F.C.S., Brisbane.

FOR several years the old-fashioned method of separating these three elements by fusing their hydroxides with an alkali and a nitrate has been largely superseded by sodium peroxide, which converts the chromium hydroxide into chromate and the aluminium into aluminate in the presence of water. The peroxide method is very expeditious and reliable even in the hands of a tyro. The use of this method must be restricted in Australia and similar countries where sodium peroxide is not made on the manufacturing scale, as the shipping companies will not carry it, owing to the attending danger from fire.

I have found that ammonium persulphate acts as a very efficient substitute. The precipitated hydroxides are mixed with water in a porcelain capsule, a small quantity of ammonium persulphate is added, and the dish is warmed until the precipitate is dissolved. By this means the chromic hydroxide is converted into a compound of chromic anhydride. On the addition of an alkali the iron is precipitated as ferric hydroxide, and the aluminium and chromium may be detected in the solution in the usual way. Re-solution of the ferric hydroxide in acid and re-precipitation with alkali effects a complete separation of the iron.

I am not aware that this method of separation has ever been suggested, but if so I may be pardoned for again directing the attention of chemists to it, especially as ammonium persulphate is easily obtainable, easier to handle, and cheaper than sodium peroxide.

## The Analysis of Liquorice-juce

By Ernest J. Parry, B.Sc., F.I.C.

SINCE my former paper on this subject was published in THE CHEMIST AND DRUGGIST of January 1910 (p. 21), two important contributions to the subject have appeared, one by E. Eriksson ("Archiv der Pharm.," 1911, 144) and the other by Telle ("Ann. des Falsifications," 1911, 3). Prior to the above publications the most important papers dealing with the subject are those of Cederberg ("Dissertation, Bonn," 1907), Zetzsche ("Pharm. Central.," 1901, 277), and Hafner ("Zeit. Oesterr. Apoth.-Vereins.," 1900, 9, 24, 29 and 30, and 1899, 23-26). So far as the writer has been able to trace, the above papers contain all that is material to the question of the analysis of liquorice-juice. The subject has recently assumed considerable interest on account of the enormous extent to which adulteration of liquorice-juice is practised. As there can be no doubt that serious attempts will be made before long to stop this practice, both here and on the Continent, it will be of considerable importance that the recent literature on the subject shall be easily available. As a matter of fact, steps have already been taken in France to establish standards of purity, resulting in the manufacture of pure juice in that country. Although the whole of the workers mentioned above are in the main in agreement as regard principles, there seems to be certain doubtful points upon which differences of opinion appear to exist. It has accordingly been considered useful to examine these points, both theoretically and practically, as supplementarily to the paper published last year.

**Glycyrrhizin.**—Hafner fixed the minimum permissible as 7 per cent. on the dry juice. As previously pointed out by me, this figure differs enormously according to the place of origin of the liquorice-juice, and in the case of ordinary Italian juices 9-13 per cent. will cover nearly every pure sample. As most other juices are not edible without the addition of some foreign matter, the glycyrrhizin-value may be normal in highly adulterated Anatolian juices, but other values will indicate dilution. Telle's figures (*loc. cit.*) for juices made in the laboratory show no value below 13 per cent. on the dry juice (my figures are for the moist juice). Eriksson, using two different processes, gives the following values for glycyrrhizin: 9.85-16.45 and 9.3-14.23 (except one value of 23.9 which is obviously an Anatolian juice). Leav-

ing out of account Spanish juices which have too little "body" to be used alone, all my results point conclusively to a minimum of 9 per cent. for normally prepared edible juices.

**Sugars.**—Hafner paid no attention to the question of sugar in liquorice-juice as indicative of adulteration. I laid considerable stress on this determination, and the papers of Eriksson and Telle amply confirm my views. Eriksson agrees that my methods give very concordant results, but proposes a different process giving much lower results, with which I am unable to agree. He removes the glycyrrhizin and then determines the "reducing" sugars by allowing the solution to stand in contact with Fehling's solution in the cold for sixteen hours. The saccharoses are determined by merely boiling the filtrate with excess of Fehling's solution for three minutes. Eriksson is certainly not justified in this, since complete reduction will not take place in the cold, nor will three minutes' boiling with Fehling's solution ensure complete inversion of the saccharoses. The consequence is that Eriksson finds less invert sugar and more saccharin present in pure juices than I do, but, I am glad to say, no material difference in the total sugars. This is really the most important point, since liquorice-root contains a ferment, and the relative proportions of inverted and unchanged sugars present in a manufactured juice always depend upon the exact method adopted in its preparation, a high temperature killing the enzyme and inhibiting inversion of the sugars. The percentage-values for sugars given in my original paper were:

	Calabrian	Anatolian	Spanish
Before inversion ...	11.50-13.50	10.48-12.00	12.50-14.50
After inversion ...	14.50-15.50	12.90-13.90	14.45-15.25

Eriksson finds *total* values of 8.3 to 13.3 per cent., while Telle obtained in one juice as much as 29 per cent., a figure I cannot regard as correct, especially as every other figure of importance recorded for the juice is quite abnormal. The above results warrant the statement that a normal edible juice contains not more than a total of 18 per cent. of sugars, reducing and non-reducing. An Anatolian juice, containing 20 per cent. or more of glycyrrhizin, if reduced to the 9-13 per cent. standard of edible Calabrian juices, will show very high values for sugar, starch, gelatin, gum, or similar substances.

**Starch and Gums.**—Eriksson's work is practically confined to the question of glycyrrhizin and sugar values, but Telle has gone into several other questions. The presence of starch is, of course, very important. Some of the purest brands contain starch which, owing to the crude method of filtration adopted in some quarters, finds its way from the root into the juice which is to be evaporated. In order to determine whether this starch is natural or added, the sample should be powdered, extracted with water, and the residue taken up with 3 per cent. ammonia solution. The insoluble matter, which should never exceed 6 per cent., should be examined under the microscope to determine the characters of the starch in comparison with that present in liquorice-root. Telle has shown that the amount of matter not dissolved in 70-per-cent. alcohol is an important feature, and I am able to confirm this fully. Telle's mode of expression is, however, unfortunate, as he really means the amount precipitated from an aqueous extract of the juice when sufficient alcohol is added to make the solution to contain 70 per cent. of alcohol. In pure juices Telle finds this value does not exceed 16.5 per cent. (except in some doubtful Levant and Spanish juices), whereas the presence of gum, gelatin, and commercial glucose containing dextrin increases this value considerably. Gum is said by Telle never to be present in pure liquorice-juice.

A consideration of the whole of the above quoted results shows that there is now available a much greater amount of reliable information in regard to the composition and analysis of liquorice-juice than there was a few years back, and that the following determinations will yield very useful results in the analysis of the juice: Moisture, mineral matter, glycyrrhizin, invert sugars, uninverted sugars, matter insoluble in water, matter insoluble in dilute ammonia, alcohol precipitate, and microscopic examination of the matter insoluble in water and ammonia. These determinations will, in my opinion, enable an analyst to express a definite opinion as to the purity of a given sample, especially if due regard be paid to the place of origin of the juice.

**POISON SCHEDULE AND DISCOUNT CIRCLE.**—We have prepared a card (5½×3½ in.), with eyelet for hanging up in Pharmacy or Store, showing the Poison Schedule, Part I. and Part II., on the front, and the Discount Circle which appeared in the Winter Issue (p. 153) on the back. Our publisher is selling the card at 2d., a copy, post free in the United Kingdom.

## Erythrina Zeyheri.

By E. Langham, Chemist, Vrede, O.R.C.

**T**HIS herb has an average height of 18 in. (45 cm.). The stem, leaves, and leaf-stem are covered with prickles, which emerge from the ribs on the stems and the veins on the leaves, and on the stems towards the root, thus affording some protection from being eaten by ruminantia.

*The Phyllome.*—The leaves vary in size from  $3\frac{1}{2}$  in. by 3 in. (8.75 by 7.5 cm.) to 6 in. by 5 in. (15 by 12.5 cm.), and are arranged in triples, the terminal leaf being sub-rotund and the lateral leaves smaller and oval. The leaves are feather-veined from the midrib and the lateral ribs; margins entire.

*The Inflorescence.*—The plant bears a spike of crimson deciduous flowers; this spike is acropetalous, and the corolla is papilionaceous, as is usually found in the *Leguminosae*; the vexillum folds over the carina and ala completely. Stamens pentadynamous.

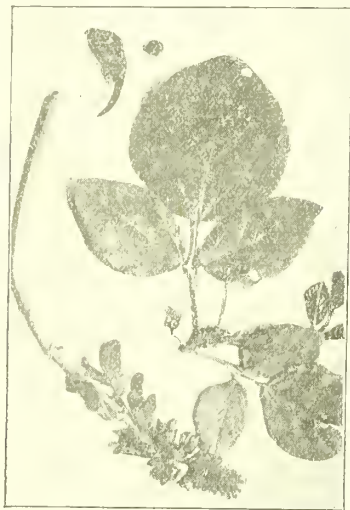
*The Fruit* is a legume, dehiscent at the ventral suture; and although the legumes contain poisonous principles, and are acrid to the taste, they lose these properties on boiling, and can be eaten the tender beans being indistinguishable from "legumes verts."

*The Seeds* are covered with scarlet testa, and contain a quantity of a bland, nutty oil, a volatile oil, and an alkaloid. The seeds of *Abrus precatorius*, also of the same order of plants, possess scarlet testa, but with a black spot on one side, and are used for making rosaries and necklaces. The seeds of *Erythrina Zeyheri* are also employed by Kafirs in South Africa for making necklaces. The colour of the seed integuments does not yield itself to chloroform. The ripe seed-pods vary in length from 4 to 12 in. (10 to 30 cm.); the average weight of each seed is 20 grains.

### Analytical Notes.

Ethelial extraction of No. 10 powder of the seed yields 28 per cent. of fixed oil, and 4 per cent. of a volatile oil

(erythrol), which latter possesses a pungent odour recalling horse-radish. Rubbed into the skin it is a powerful irritant; the mixture of 28 per cent. fixed oil and 4 per cent. volatile oil, applied to the tongue, causes speedily a pricking sensation. The essential oil is soluble in alcohol and ether, distils over at  $140^{\circ}$  F. ( $60^{\circ}$  C.), and is volatile at all ordinary temperatures, volatilising freely at  $65^{\circ}$  F. ( $18^{\circ}$  C.). The oil appears to belong to the butylic series of alcohols. Further work



ERYTHRINA ZEYHERI.

needs to be done to determine its chemical nature.

The alkaloid erythrine, obtained by alcoholic extraction, is soluble in alcohol, insoluble in ether or benzol, and is obtained to the extent of 15 per cent. from the seed. Auric chloride gives a purple precipitate. A solution of the alkaloid boiled with ammonia, or with caustic potash, changes to a sap-green colour. A solution boiled with caustic potash and cupric sulphate gives a precipitate of cupric hydrate only. A characteristic reaction is obtained in the following way:

A solution of the alkaloid is boiled with dilute sulphuric acid for some time, erythrinogen being formed; the resulting solution is rendered strongly alkaline with caustic potash, cupric sulphate added, and warmed; a crimson-scarlet precipitate is thrown down.

The alkaloid gives the characteristic reaction with Thresh's alkaloidal reagent. Touched with nitric acid it

gives a bright orange colour, changing to red; touched with sulphuric acid it gives a dull red colour, darkening in tint.

### Therapeutical Uses.

The fixed oil is aperient; the oil must be free from volatile oil or it occasions griping and intestinal pains. The volatile oil is an irritant and is useful in the preparation of liniments. The alkaloid appears useful in the treatment of scrofula. The fluid extract of the leaf has been found of service as a blood-purifier.

## Approved Sheep-dips.

**T**HE compulsory dipping orders which are issued from time to time by the Board of Agriculture and Fisheries under the Diseases of Animals Act, 1894 to 1910, make it necessary for chemists in scab-infected areas to have their own dips approved by the Board. Proprietary dips are not regarded as "efficient sheep-dips" complying with legislative requirements unless they have been submitted to the Board and approved by them. Over 400 proprietary dips are recognised by the Board, and it is not difficult for a pharmacist to submit a dip which the Board will accept. The Board's own formulae were given in THE CHEMIST AND DRUGGIST of February 4, 1905 (p. 204), while in the issue of September 3, 1904, there is ample indication of lines on which approved proprietary dips are constituted. These details are also printed in the Board's pamphlets (Nos. 61 and 145, obtainable from the Board post free on application) and in "Pharmaceutical Formulas," pp. 427-8. Manufacturers themselves must make application for the approval of their dips, on a form which can be obtained from the Board of Agriculture, 4 Whitehall Place, London, S.W., a copy of which is subjoined:

*Application to the Board of Agriculture and Fisheries for Approval of a Sheep-dip for Sheep-scab.*

*N.B.—The application is in every instance to be made by the manufacturer of the dip.*

- |  |    |
|--|----|
| 1. Name of Sheep-dip.  | 1. |
| 2. Name of Manufacturer.   | 2. |
| 3. State nature and amount of materials used in making the dip; and percentage composition if known.   | 3. |
| <i>(Information as to the composition of a dip will be treated by the Board as strictly confidential.)</i>   |    |
| 4. State the proportion in which the dip is recommended to be diluted in water when used for the dipping of sheep for Sheep-scab.  | 4. |
| 5. State whether it is proposed to place the dip on sale to the public.  | 5. |
| 6. State the evidence* available to show that the Sheep-dip, when used in accordance with the directions of the maker, is effective against Sheep-scab, and that its use does not affect detrimentally the commercial value of the fleece. | 6. |

Signature of manufacturer of dip .....

Date .....

Address .....

1. A separate form should be used for each variety of dip submitted for approval.

2. The application should be transmitted by the manufacturer of the dip to the Secretary, Board of Agriculture and Fisheries, 4 Whitehall Place, London, S.W., together with a sample of the sheep-dip as put up for sale, or—where the dip is not for sale—as ready to be used. Full directions as to use should also be sent. The sample should weigh not less than 2 lb., or, in the case of a fluid, should measure not less than 1 pint. A separate copy of the directions as to use should also be supplied, in addition to the copy affixed to the sample.

3. After approval of a dip by the Board, the manufacturer is at liberty to pack the dip under different labels and names for various customers in Great Britain. A separate label should, preferably, be used to cite the Board's approval, which should in all cases be expressed in identical terms, namely, "Approved by the Board of Agriculture and Fisheries for sheep-scab in Great Britain in the proportion of to ." Two copies of every such label in use should be furnished to the Board by the manufacturer of the dip. The directions for the use of the dip must in all material respects remain the same as those upon, or supplied with, the samples actually approved by the Board.

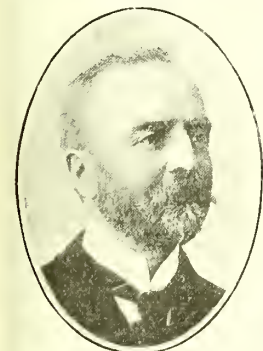
\* Any documentary evidence available should accompany the application.

## EONIA WORKS.

### Impressions of a Visit to the New Factories in Bermondsey of Messrs. J. & E. Atkinson, Ltd., Perfumers and Soapmakers.

SCARCELY a dozen years have elapsed since in these pages was printed an article entitled "A Scent Centenary," which told how James Atkinson, "a Cumberland lad," started, at 44 Gerrard Street, Soho, "to

manufacture perfumes that would be equal to the French essences." In the course of the article we mentioned how, in 1869, Mr. Eugene V. Barrett went into the business, sharing in the management from that time until the death of Mr. James Atkinson, *secundus*, in 1895, when Mr. Barrett became sole manager, and it was added that "it was left for Mr. Barrett to . . . carry the firm's ramifications into every corner of the globe, so that now there are agents and representatives of the firm engaged in its interests in every chief city of the



MR. EUGENE V. BARRETT  
(Managing Director).

world." The article concluded with these sentences:

"To perpetuate the Atkinson centenary a bouquet, a soap, etc., well worthy of the occasion have been invented. They are to be known as members of the Atkinson Centenary Series. They have a style all their own, are new creations, and the odours are purely natural."

When these sentences were printed in the *C. & D.* of June 3, 1899, Mr. Barrett may have had in his mind the idea of doing as much in the decade to follow as had been done in the centenary that was closing, but even he could not have dreamt that in this year of grace 1911 the new order of perfumery would have become so important a feature in the Atkinson business as to give a name to a local habitation, "The Eonia Works," and that the business progress since then should rival that of the century. These are the facts of the present nevertheless, and Messrs. J. & E. Atkinson, Ltd., in a monograph which they contribute to the advertisement section of this Colonial Issue, describe their new factories with a wealth of illustration which is consistent with the rich equipment of the place.

"Eonia" is the name coined by Mr. Barrett for the Atkinson-centenary series already mentioned. The series has been singularly successful. It typifies modernity in quality, style and artistic production; also determination to keep pace with present-day evolution and progress in perfume taste, compounding and toilet production; while all that is best in the old is retained. In the monograph Messrs. Atkinson tell how the business grew from its inception; as it grew it branched, one part of the manufacture being located here, another there, and so on, all being controlled from the headquarters, that delightfully quaint shop, No. 24 Old Bond Street, W., with which generations of the best people have had acquaintance, and where Mr. Barrett's office was—looking upon Burlington Gardens, whose only connection with flowers nowadays comes from the scents that are wafted from No. 24. When the need for more room became so pressing there was no thought of abandoning "the shop"; that is a London landmark, an aristocratic association, and a business reality, which has grown with the years into an asset such as money could not create.

#### A New Home

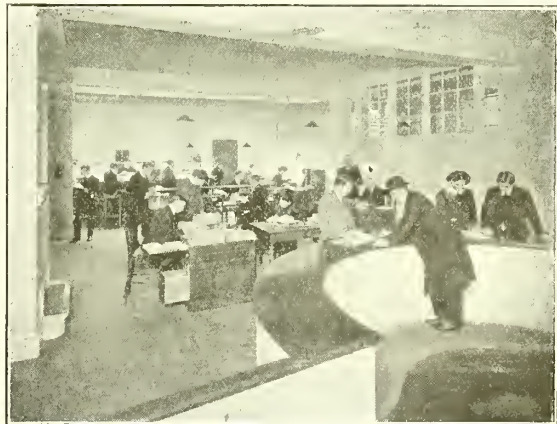
has been found for the various departments of manufacture, hitherto scattered, in a palatial factory situated in Southwark Park Road, Bermondsey, which, well back from the street, stands in its own grounds, that have space

in them for extensions. The site is shaped somewhat like a capital L the shorter limb of which ends on the street front. There fine new offices have been erected, and behind them a series of one-floored warehouses, which internally are one mammoth hall, lighted by glass roofs, the whole being devoted to the storage of bottles, pots, and kindred containers. The floor-space is about 12,000 square feet. The offices and warehouse make up the shorter limb of the L and are faithfully described in the firm's monograph. The interior of the office is most attractive, the private rooms not less so than the public office, for in these rooms have been gathered many fine pieces of old furniture which Mr. Barrett and his predecessors used in the Old Bond Street house, and, however elegant modern oak furniture may be, their is homeliness and warmth about old mahogany that one likes. This is a passing observation. Both the clerical and managerial floors of the office building are conspicuous by their adaptation to and equipment on modern lines for administrative work, and these characteristics are what Mr. Barrett set out to provide when the building was designed and furnished. It has a Portland-stone front of classic design, and the pediment of the doorway bears in sculptured lettering the names of the firm and the works.

The entrance to the warehouses and factory is by a gateway to the right of the offices. Passing through this we find on the right a series of houses, including caretaker's residence, dining-rooms for the employés, and boiler-house, in which two fine Lancashire boilers are used to produce all the steam required for heating purposes, as the power used throughout the factories is electric, and is obtained from the public supply. An ample courtyard surrounds the factories on three sides. "Factories" is correct, for we find on inspection a double manufacturing equipment for all spirituous preparations, and for the first time we had the pleasure of walking through

#### A Private Bonded Factory

in which thousands of gallons of that most jealously guarded fluid, rectified spirit of wine, enter, are manipulated in varied processes, bottled as numerous products,



GENERAL OFFICE.

A view from the showroom corner on the right. Outside the counter is a staircase to the directors' and secretarial rooms above. A companion staircase is inside the counter.

packed for export, and leave the premises for shipment without paying a penny to Customs or Excise. Messrs. J. and E. Atkinson, Ltd., have done this for years, but previously in a bonded factory at the docks, and that seems not to have the air of freedom which prevails in the

Eonia Works, for here, although a sealed door now and then, Government locks and an occasional glimpse of uniformed officials denote Revenue vigilance, the bonded factory is indistinguishable from the contiguous one in which



CORNER IN THE PERFUMERY FLOOR.

The photograph does not show the laboratory apparatus for extracting and compounding perfumes, which is done on this floor under bond. It shows, however, the storage tanks and containers used for the preparations, and the figures of workmen serve to indicate the huge sizes of these containers.

similar operations are conducted with duty-paid spirit. In saying this we indicate the reasonableness of the Commissioners of Customs and Excise in their willingness to foster British industries which employ dutiable articles in manufacture, so that the products are not taxed or in any other fiscal manner handicapped before they enter colonial and foreign markets. While the manufacturers have complete freedom in the handling of duty-free spirit, there is complete protection of the revenue through the presence of the officers and the precautions applied. Messrs. Atkinson are to be congratulated upon furnishing all manufacturers who use alcohol with so complete and extensive a demonstration of manufacturing in private bond.

May we express the hope that before another Colonial Issue of *THE CHEMIST AND DRUGGIST* comes round some of our pharmaceutical manufacturers may have obtained similar facilities for the production of alcoholic galenicals in their own factories? In the Eonia Works they have an instance of how it is done, and as perfume-making includes maceration and percolation, no new processes have to be considered by the Commissioners; in fact, methods are immaterial, since all that the Revenue cares for is legitimate use of the spirit for the purposes of export on a sufficiently large scale to warrant the presence and constant supervision during working hours of one or more Revenue officers. This remark necessarily implies that

#### Messrs. Atkinson's Export Business

is of that large scale. It was in 1899 when we said that their "export business *long ago* required the establishment of a bonded factory," and since then it has so grown that it has had to be taken away from a place where several manufacturers work under one roof, to this individual and private factory. This factory and the contiguous free one consists of ten floors, each 100 ft. long by 40 ft. wide, giving a total area of no less than 40,000 square feet. The basement and ground-floors of both are "free," and are used for the storage of the multitudinous materials required in the factories and packing floors, into the nature of which it is unnecessary to enter here. Various warehouses and offices outside Revenue supervision are also placed on these floors, including offices for the works manager. The factories are well equipped with electric lifts and cranes, and although those on the bond side are no doubt within Revenue vision, the visitor sees no difference in their working.

We get the first indication of officialdom when we ascend the stair to the first floor, and note the Customs

lock on the door, and pass a window where an official eye catches ours as we go by. Passing the first and second floors we reach the third, where the work in bond may be said to begin, for this is the Liquid Factory, where perfumes and spirituous toilet preparations are compounded and stored prior to their gravitation downwards to the packing floors. Floral pomades are the basis of most perfumes, and their extraction by spirit is the principal mechanical operation that goes on in this room, macerators and refrigerators playing the principal part in this.

Many things go to the making up of perfumes, and some secrets could be picked up in this laboratory, but the uppermost thought in the visitor's mind was the perfect freedom with which dutiable and non-dutiable articles were handled, the fact of the matter being that protection of the inlets and outlets of the bonded factory means freedom within, added to which is the Revenue's long experience of the Atkinson business and all its ways. It is well known that floral pomades yield three macerates to alcohol, the third forming the first menstruum for a fresh batch of pomade. The maceration is done in huge copper cylinders, shaped like jam jars, in which two churning screws revolve against each other like an emulsifier. The operation lasts five hours, at least in the first extraction, then the pomade is treated with spirit again for a second and third time as stated. A certain amount of fatty matter, besides the odorous principles, is dissolved by the spirit, and this is eliminated by freezing—a process in which much ice is employed. Thereafter the products are stored in tin-lined copper standards or cylinders, some of which are of 400 gallons capacity. Atkinson's White Rose and Eau de Cologne are two products which bulk large in the firm's business, but the conspicuous point about the stock is its infinite variety. Spirituous hair-lotions are also a feature among the laboratory products.

#### The Bonded Finishing-room

occupies the second floor of the building, and a most interesting room it is, for here scores of young women are employed in bottling perfumes, hair-lotions, brilliants, and other spirituous preparations for export, and finishing them off in first-class style. Again the visitor is impressed by the fact that the liquids handled have not paid duty to H.M. Customs, yet there is no abuse, no loss to the Revenue, and Messrs. Atkinson get their goods into the world's markets without fiscal hindrance. "Cheapness" in perfumery too often means "water and poor scents." Their cost is reduced by the most economic methods without sacrificing quality, so that even a shilling bottle of per-



GLIMPSE OF THE BONDED FINISHING-ROOM.

Here perfumes made from duty-free alcohol are bottled, capped, labelled, and packed in cases.

fume is produced which has delicacy and stability of odour combined with artistic packing and labelling. The designs of all labels are the best, and carefully carried out. There is a particularly fine engraved label for the Atkinson Eau de Cologne that is put up in handsome square stoppered

bottles, up to 36 oz., the stoppers being secured with an official-like seal. The "Cologne" is also put up in the ordinary manner, and boxed six to the case, but these

square bottles are greatly in demand for export. Similar fine bottles are also used for some of the hair-lotions, and the fancy cases and boxes for perfumes are equally rich and artistic in appearance.

As the goods are finished by the women they descend by lift to the floor below, which is also bonded, and there the export orders are filled and packed into cases for carriage by bonded vans to the docks for shipment. Again the visitor is struck by the freedom with which all this work is done in bond, there being no detectable difference between what is done here and in the packing floors of any export warehouse.

Duty-paid spirit is, in the Revenue sense, "free" spirit, hence one-half of Messrs. Atkinson's manufacturing building is called

### The Free Factory.

Similar operations to those conducted in the Bonded Factory are done here, besides all those in which no spirit is employed. We do not propose therefore to describe the spirit operations—manufacturing, bottling, and packing—for they are the same. The only difference being an occasional one of kind due to the home demand not being always exactly the same as the export requirements. The top floor of the Free Factory is entirely devoted to the manufacture of toilet soaps, a surprisingly prominent part of Messrs. Atkinson's business. They still have a demand, indeed an increasing demand, for their Old Brown Windsor Soap, which is the only remaining boiled toilet soap on their list—i.e., it is made just as James Atkinson, *primus*, made it, by melting the soap stock and adding the other ingredients to the "melt." This is a comparatively small part of the soap-making, however, for the removal to premises of so ample proportions has given the company an opportunity of installing the most recent machinery for hashing, milling, squeezing, cutting, stamping, and pressing toilet soap, all the machines being driven by electric motors, which are placed in the rafters part of the floor. On entering this part of the premises we were met by Mr.



MR. HORACE BARRETT  
(Director).



CREAM AND COSMETIC DEPARTMENT.

Horace Barrett, clad in white overalls, and he had in his hand a cream-white cake of soap, the first of a new brand. "We can do that at thirty shillings a gross," he said to his father.

"Good," replied the managing director as he felt and nelt it.

A few minutes later we noticed a cylinder of soap

emerging from a squeezer. It was cut into shaving-stick lengths.

"Yes, that is shaving-soap," was the reply to our query. "A special kind; retails at two-and-six a stick."

These two brief conversations give an idea of the range of the company's soap productions, and may save us going into details as to the kinds. Are they not written in the Atkinson catalogue? Besides the soap machinery on this floor, there are hot-air chambers for drying the soap; steam pans, water-baths, and other provision for compounding toilet-creams, tooth-pastes, and other toilet galenicals, so to speak.

It is on the second floor that all kinds of perfumes and liquid toilet preparations are made with duty-paid spirit, and the first floor contains the Home Trade finishing rooms, besides rooms in which toilet-powders, sachet-powders, and other powders are compounded, a fine equipment of milling and sifting machinery being installed here. The ground floor is chiefly devoted to the Home Trade general warehouse, which to all appearance is like a wholesale druggist's place for Dries and Wets, the finished products ready to fill orders, for the articles most in demand are put up in dozen or other packages according to requirements. The floor on the bond side contains stocks of raw materials, heavy goods, and other adventitious requirements such as boxes and packing-cases. The basement floor is well lighted and ventilated, and makes admirable stores for articles which have to be kept at an equable temperature, such as essential oils and floral pomades.

The whole of the works are so well described and illustrated in Messrs. Atkinson's monograph, already referred to, that we have in these observations avoided repetition of certain details, but have rather endeavoured to show how an old-established business has been keeping pace with present-day requirements, especially colonial and foreign demands. The factories embody not only the latest fiscal facilities, but the newest in the Art of Perfumery, and in commercial enterprise.

### Roses and Orange-blossoms.

THESE views are from photographs taken at Grasse when the roses and orange-trees were in blossom. The roses are



GATHERING ROSES.

chiefly used for making *pommade*, and the orange-blossoms for the distillation of neroli oil. The greater part of the



GATHERING ORANGE-BLOSSOMS.

latter business is in the hands of a syndicate, who fix the prices of the flowers for the distillers.

## The Perfume Industry.

DR. CHARABOT, the well-known French expert in essential oils, who has especially studied the elaboration of perfumes in plant tissues, has published an interesting monograph on "The Present State of the Perfume Industry." In this he points out that the odorous raw materials for perfumery are either of natural origin or obtained by means of chemical processes. The natural products have been the subject of numerous scientific researches which have led either to the artificial preparation of new odorous principles or of those already provided by nature, which art has succeeded in imitating. As a matter of fact, few really synthetic perfumes exist, the majority of the so-called synthetic perfumes being derived by transformation of natural substances. For example, synthetic vanillin is practically entirely obtained from eugenol, a constituent of oil of cloves. On the other hand, artificial musk is a true synthetic compound obtained from a source which is absolutely independent of any plant substance, but is, of course, in no way related to the odorous constituents of natural musk.

During the past few years much progress has been made both in the treatment of natural perfumes and in that of artificial perfumes. The methods of extraction of natural perfumes are continually being improved, so that the perfume is obtained in a more perfect and more natural condition, and the products are at the same time presented in more convenient forms than was quite recently the case. The cultivation of the perfume-yielding plants is being greatly improved, and the study of the formation of the odorous products in plants has already had important results from a commercial point of view. The natural result of these modern developments is that the scale of odours to which the perfumer is able to turn is being continuously enlarged.

Dr. Charabot details the principal groups of natural perfumes which necessarily fall into two groups—animal and vegetable. The former are not discussed at length, but with regard to the latter, interesting accounts of the modern methods of extraction of perfumes from plants are given. These are: (1) pressing, (2) distillation, (3) extraction by fixed solvents, (4) extraction by volatile solvents, and (5) infusion. The two first-named processes need not be described. The process of extraction by fixed solvents, generally known as "enfleurage," is minutely detailed. The extraction by volatile solvents has produced a large number of the most modern forms of plant perfumes. This method originated in 1835, but has only been practised on a commercial scale for about fifteen years. It yields products which are suited to the present requirements of perfumery, and which conform admirably to the new conditions under which the art of perfumery is developing. The following products are described by Dr. Charabot:

**Concrete Flower Oils.**—These products are extremely concentrated, and their perfume faithfully reproduces the perfume of the flower, but, although they show distinct advance over the old form of flower pomades, their application raises difficulties which tend to reduce some of their advantages. This is due to the fact that petroleum spirit dissolves, together with the perfume of the flowers, certain vegetable waxes which are insoluble in alcohol, and which are quite free from odour, and therefore valueless from the perfumery point of view. The insolubility of these odourless waxes in alcohol makes the employment of the solid oils inconvenient.

**Liquid Flower Oils.**—In regard to these, Dr. Charabot recalls that some fifteen years ago he was engaged on his first researches at the Sorbonne in the laboratory of Charles Friedel; the discovery of ionone had recently been announced, and synthetic products were beginning to claim their place in compositions of the finest quality. "Perfumery then had need of natural raw materials sufficiently powerful, and consequently sufficiently concentrated, not to be dominated, crushed out of existence by the chemical perfumes. These latter were capable of imparting, even to the most delicate compositions, valuable characters of originality and fixity, but only on the express condition that they can be sufficiently dominated by products derived from flowers, which are the only ones that can impart delicacy and sweetness. It was this necessity, accentuated still more by the tendency of fashion towards powerful and tenacious perfumes, which

struck me, together with the inconveniences involved by the first products obtained by means of volatile solvents. And thus my researches were directed towards obtaining the perfumes of flowers in the form of products both powerful and soluble in alcohol. They soon led to a satisfactory solution, and the preparation of products conforming with the desiderata mentioned above. Since then we have been able to substitute for the first processes which I invented methods which are more perfect because they have been deduced from the accumulation of acquired knowledge both on the composition of the odorous matters and of their successive state in the plants. And these methods, made appropriate to the treatment of each flower, have enabled us, by employing the solvents in a suitable manner, to leave the vegetable wax, the inodorous substance which is insoluble in alcohol, behind, and to extract solely and completely the odorous principles in the form of products entirely soluble in alcohol. These products, the absolute flower oils, are consequently extremely convenient to use, since it is only necessary to pour them into alcohol to obtain a clear solution of any concentration that may be desired." The principal flowers whose perfumes are produced in this form are rose, orange, jasmin, tuberose, cassie, jonquil, narcissus, carnation, mignonette, broom, mimosa, and violet.

**Colourless Flower Oils.**—It is well known that the products of many flowers are highly coloured, and perfumes made from them stain handkerchiefs. Dr. Charabot has worked out a process by which the colouring-matters are practically eliminated from the extract of the plant, leaving the perfume in a concentrated, soluble, and almost colourless form.

Dr. Charabot concludes this section of his monograph with the remark that although one might be tempted to think that the most modern methods would have displaced those which are of great age, this is not the fact. At Grasse and in the neighbourhood the whole of the above-mentioned processes are employed simultaneously. After some remarks on the topography of the district, Dr. Charabot mentions that the ownership of the land is so divided up that each factory has to procure flowers from a large number of owners. The flowers are collected and delivered by the brokers, who serve as middlemen for the producer and manufacturer. The contracts are usually made to be paid for at the daily market rates, which are established at the end of the harvest, according to the supplies of flowers. Violets flower during the greater part of winter, but the perfume is extracted in the factories only at the end of March and in April. Both the Parma violet and Victoria violet are utilised, about 300,000 kilos. being the average annual crop of these. The violet leaf yields an extremely powerful essential oil, which is a welcome addition to the series of perfume materials.

Discussing the question of the composition of natural perfumes, Dr. Charabot reviews briefly work done on the evolution of perfume in the plant by himself and his colleague, Hébert, during the last ten or twelve years. The odorous matter makes its appearance at first in the young green organs. The perfume continues to form and accumulate until the flowering period, but at a diminishing rate. The perfume compounds migrate from the leaf into the stem, and thence usually into the flower. A portion enters into solution and, by osmosis, penetrates the stem. On arriving at tissues already saturated with similar products a portion is precipitated, while the rest (consisting of soluble substances) continues to diffuse through the membranes and reaches the inflorescence. At the time of fertilisation a certain amount of essential oil is always consumed. It is possible, and even probable, that the green organs produce at this time a further quantity of perfume. The net result, however, at this period is a loss in the amount of perfume compounds present. The practical result of this conclusion is that the perfume plants should be gathered shortly before fertilisation.

In discussing the principal artificial perfumes, Dr. Charabot concludes that "the natural and synthetic perfumes industries, though rivals in appearance, lend each other mutual support in the path of progress on which they both are travelling. They afford one more instance of the truth, with the fruitful instruction which it bears with it, that real, continuous progress, universally beneficial, is invariably manifested when science and industry are bound together in close union, strong and fertile."

A POISONS BILL to regulate the handling of poisons is now under consideration by the local and central medical and pharmaceutical bodies of Japan.

# The New German Pharmacopoeia.

## The Galenical Preparations.

ONLY a limited number of new galenical preparations, twenty, have been included in the new edition, and even these have long found a prominent place in our *materia medica*, to mention but the most striking additions: *collempastrum adhæsivum* and *collemp. zinci*, *emulsio olei jecoris aselli*, *extr. cascar. sagrad. liq.*, *extr. cinchonæ liq.*, *extr. granati liq.*, *liq. aluminii acetico-tartarici*, *pasta zinci* and *pasta zinci salicylata*, *spiritus saponis kalini*, *tinct. ipecac.*, *traumaticin*. On the other hand, a number of formulæ have been altered, notably the preparation of the extracts of *belladonna*, *hyoscyamus*, and *nux vomica*—the first two to be made from the dried leaves—while the use of *arachis* oil and *vaselin* has necessitated some changes. Percolation is, however, restricted solely to the preparation of the nine official liquid extracts. Standardisation is prescribed in the case of the extracts of *belladonna*, *hyoscyamus*, *opium*, and *nux vomica*, and the tinctures of *opium* and of *nux vomica*; in a number of other galenicals a minimum content of active ingredients is required. It is interesting to note that assay processes have been introduced in the case of the mercurial preparations—plaster and ointments\*—based on the titrimetric method. It is distinctly required that decoctions and infusions (with the exception of *inf. sennæ co.*) are to be prepared fresh each time. In the place of *vinum colchici* and *vinum ipecacuanhæ*, which have been dismissed, the respective tinctures (1:10) are to be dispensed.

Some general descriptions of certain forms of galenical preparations, mainly for legal purposes, have been included. Thus "chartæ" are medicamented papers or textile fabrics; "gelatinæ" are jellies—medicinal preparations, which are elastic at ordinary temperature and are liquefied by gentle heat, etc.

Where not otherwise stated, all parts refer to parts by weight whether fluids or solids.

**ACETUM SCILLÆ.**—Dried squill fairly fine cut, alcohol, of each, 5; acetic acid (30 per cent.) 9; water 36. Allow to stand for three days, then strain, and filter after a delay of twenty-four hours. Sp. gr. now given: 1.020 to 1.025. To contain 4.4 to 5 per cent. acetic acid=10 c.c. should require for neutralisation 7.5 to 8.5 c.c. of normal potassium-hydroxide solution (phenolphthalein as indicator).

**ACIDUM ACETICUM DILUTUM** contains 50 per cent.  $\text{CH}_3\text{COOH}$  (B.P.: 4.27).

**ACIDUM CARBOLICUM LIQUEFACTUM.**—Five parts of water are to be added to 50 parts of melted carbolic acid. Sp. gr. 1.068 to 1.071 (B.P.: 1.064 to 1.069). Is required to contain at least 87.8 per cent. of phenol, assayed as follows: about 1 gram of liquefied phenol is accurately weighed, and diluted with water to 1 litre; 25 c.c. of this solution is introduced into a flask provided with a glass stopper, of a capacity of 250 c.c., and 50 c.c. of solution of potassium bromide (6:1.00) and 50 c.c. of solution of potassium bromate ( $\text{KBiO}_3$ ) (1.6702:1.000) are added, as well as 5 c.c. of sulphuric acid. After standing for fifteen minutes 2 grams of potassium iodide is added; the whole is well shaken and allowed to stand for five minutes. It is then titrated with N/10 sodium thiosulphate. The number of c.c. required is subtracted from thirty, and the remainder, multiplied by 0.001567, indicates the amount of phenol present. One gram of liquefied phenol should require not more than 16 c.c. of N/10 sodium thiosulphate, using solution of starch as indicator.

**ADEPS BENZOATUS** is now made with benzoïn (1+50) in the place of benzoic acid.

**AQUA CALCULÆ.**—Liquor calcis is required to contain 0.15 to 0.17 per cent. of  $\text{Ca(OH)}_2$ , titrated with normal hydrochloric acid, phenolphthaleïn as indicator.

**CHARTA SINAPISATA.**—Mustard paper is prepared from black-mustard seeds deprived of fatty oil, and is required to contain 0.0119 gram of oil of mustard in 100 square centimetres.

**CHININUM FERRO-CITRICUM.**—Iron and quinine citrate is required to contain 21 per cent. of iron and 9 to 10 per cent. of quinine; the latter is determined by dissolving 1 gram of the salt dried at 100° in 5 c.c. of water and adding solution of sodium hydroxide until strongly alkaline; the solution is then extracted four times with 10 c.c. of ether: the clear ethereal layers after evaporation and drying at 100° should yield a residue weighing at least 0.09 gram—i.e., quinine.

\* In the case of ung. hydrargyri ammon. the strength of the volumetric solution is given as "about."

On drying the salt at 100° it should not lose more than 10 per cent. in weight.

**COLLEMPASTRUM ADHÆSIVUM.**—Wool-fat 67; copaiba 8; caoutchouc 25; orris-root in fine powder 25; petroleum benzin q.s. The caoutchouc is left in contact with 150 parts of petroleum benzin until a uniform solution is obtained. The wool-fat and copaiba are melted together and heated to 100° for about ten minutes. The partly cooled mixture is dissolved in 15 parts of petroleum benzin, and when completely cool is added to the caoutchouc solution. The orris-root powder is first dried at 100° and sufficient petroleum benzin added to make a thick paste, which is then mixed with the other solution. It is now spread on unglazed calico, which is allowed to lie flat until the benzin has evaporated.

**COLLODIUM.**—A test for the content of pyroxylin is included: 10 grams is warmed on the water-bath and 10 c.c. of water is gradually added, stirring gently. On evaporation on the water-bath and drying the residue at 100° it should weigh at least 0.4 gram.

**COLLODIUM ELASTICUM.**—Flexible collodion is prepared now by adding 3 parts of castor oil to 97 parts of collodion.

**EMPLASTRUM CANTHARIDUM ORDINARIUM.**—Cantharidis 2; arachis oil 1; yellow wax 4; turpentine 1. The cantharidis is heated with the oil for two hours on the water-bath, whereupon the other ingredients are added and the whole stirred until cool.

**EMPLASTRUM HYDRARGYRI.**—To contain 20 per cent. of mercury: mercury 2; wool-fat 1; yellow wax 1; lead plaster 6. An assay process to determine the content of mercury (by titration) is given (see "Ung. hydrargyri cin.").

**EMPLASTRUM LITHARGYRI.**—Lead plaster. Arachis oil 1; lead 1; lead oxide 1; water q.s.

**EMULSIO OLEI JECORIS ASELLI.**—Cod-liver oil emulsion contains 50 per cent. of cod-liver oil: cod-liver oil 500; gum acacia fine powder 5; tragacanth fine powder 5; white gelatin 1; calcium hypophosphite 5; cinnamon-water 100; benzaldehyde 3 drops; syrup 84; water 300. The gum acacia and the tragacanth are mixed with the oil in a bottle, the cold solution of the gelatin in the water is added and the whole shaken vigorously for five minutes. The solution of the calcium hypophosphite in the cinnamon-water, the benzaldehyde and the syrup are then gradually added to the emulsion, and after standing for a few hours the whole is again well shaken.

**EXTRACTA FLUIDA.**—The general rules to be observed in the process of percolation have been slightly altered: 100 parts of the powdered drug are moistened with the prescribed amount of fluid and allowed to stand for twelve hours in a closed vessel. The mixture is then tightly packed in a percolator, in such a way that the formation of larger air-spaces is avoided, and sufficient fluid is added to cover the drug; the fluid must begin to drop from the lower opening. The latter is then closed and the percolator is covered and allowed to stand at ordinary temperature for forty-eight hours. Percolation is then begun, not more than 30 drops being allowed to pass in one minute. The first amount which passes, corresponding to 85 parts of the drug employed, is placed aside, and extraction is continued until the drug is exhausted. The second portion is evaporated at as low a temperature as possible to the consistency of a thin extract; this is mixed with the first portion and sufficient of the menstruum is added to make 100 parts of liquid extract. It is allowed to stand for a few days before filtering.

The following general test for heavy metals is included: The residue obtained on ignition of 2 grams of liquid extract is heated with 5 c.c. of dilute hydrochloric acid; the filtrate should not be altered by the addition of solution of sulphuretted hydrogen.

**EXTRACTUM BELLADONNÆ.**—To contain 1.5 per cent. of hyoscyamine. Coarsely powdered (dried) belladonna-leaves 1 part and alcohol (69 per cent.) 5 parts are macerated for six days and then strained and pressed. The residue is treated in the same manner for three days with 3 parts of alcohol (69 per cent.). Both liquids are mixed, allowed to stand for two days, filtered, and evaporated on the water-bath until the alcohol has been removed. The residue is treated with equal parts of water, and then filtered after standing for twenty-four hours, and the filtrate evaporated to the consistency of a thick extract. If necessary it is diluted by the addition of purified liquorice-juice (*succus liquoritiæ*) so as to have a content of 1.5 per cent. of hyoscyamine. The assay process is substantially the same as the method of assaying cinchona, using ether as the extractive agent, and solution of sodium carbonate. The residue obtained from evaporating a specially prepared chloroformic extraction must correspond to the tests for atropine.

**EXTRACTUM CASCARÆ SAGRADÆ FLUIDUM.**—Prepared with a menstruum consisting of alcohol (90 per cent.) 3 parts, water 7 parts.

**EXTRACTUM CHINÆ AQUOSUM** contains 6.18 per cent. of cinchona alkaloids, of the average molecular weight 509.

**EXTRACTUM CHINÆ FLUIDUM** contains 3.5 per cent. of cinchona alkaloids at least: 100 parts of red cinchona-bark in middle fine powder are moistened with a mixture of 10 parts of dilute hydrochloric acid, 10 parts of glycerin, and 30 parts of water, and allowed to stand for twelve hours in a covered vessel. The mass is then passed through a sieve, packed in a percolator, and moistened with a mixture of 5 parts of dilute hydrochloric acid and 100 parts of water. After forty-eight hours percolation is begun with the addition of water, and the first 70 parts are collected separately; percolation is continued until the percolate is no longer rendered cloudy by the addition of solution of sodium hydroxide. The second part of the percolate is evaporated to 18 parts and added to the first part, and the whole is made up to 100 parts by adding sufficient of a mixture of 2 parts dilute hydrochloric acid and 10 parts of alcohol (90 per cent.).

**EXTRACTUM CHINÆ SPIRITOSUM** contains at least 12 per cent. of cinchona alkaloids; it is prepared by extracting cinchona-bark with alcohol 69 per cent.

**EXTRACTUM FILICIS**, when diluted with glycerin and examined under the microscope should not reveal the presence of starch.

**EXTRACTUM GRANATI FLUIDUM.**—Obtained by percolating with a mixture of equal parts of alcohol 90 per cent. and water; contains at least 0.2 per cent. of the alkaloids of pomegranate-bark.

**EXTRACTUM HYDRASTIS FLUIDUM.**—Percolated with alcohol 69 per cent. (B.P.: 45 per cent.); to contain 2.2 per cent. of hydrastine. On evaporation and drying at 100°, the residue should weigh 20 per cent. of the amount employed.

**EXTRACTUM HYOSCYAMI.**—Contains 0.5 per cent. of hyoscyamine; prepared from dried hyoscyamus-leaves in the same manner as ext. belladonnæ.

**EXTRACTUM SECALIS CORNUTI.**—Two parts of ergot freshly powdered are allowed to stand for six hours with 4 parts of water; after pressing the residue is again treated in the same way with 4 parts of water. The liquids obtained are mixed and evaporated to 1 part, and 1 part of alcohol added. This is allowed to stand for three days before being filtered and evaporated to the consistency of a thick extract.

**EXTRACTUM SECALIS CORNUTI FLUIDUM.**—Ergot in coarse powder is percolated with a mixture of alcohol (90 per cent.) 1 part, water 4 parts. Before evaporating the second portion of the percolate 2.4 parts of hydrochloric acid (25 per cent.) are added for every 100 parts of ergot employed.

**EXTRACTUM STRYCHNI.**—Extract of nux vomica is required to contain 16 per cent. of alkaloids, calculated as strychnine and brucine, with an average molecular weight of 364; if necessary it is to be diluted by the addition of sugar of milk. One part of coarsely powdered nux vomica is macerated for twenty-four hours at a temperature not exceeding 40° with 2 parts of alcohol 69 per cent., strained and pressed, and the residue is treated similarly with 1.5 part of alcohol 69 per cent. Both liquids are mixed and filtered after standing for several days, and then evaporated to dryness.

**LANOLINUM.**—Wool-fat 15, water 5, liquid paraffin 3.

**LINIMENTUM AMMONIATUM.**—Arachis oil 4, liquid ammonia 1.

**LIQUR ALUMINII ACETICO-TARTARICI.**—Contains about 45 per cent. of aluminium aceto-tartrate. Solution of aluminium acetate [containing 7.3 to 8.3 per cent. of basic aluminium acetate,  $\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3 \cdot \text{OH}$ ] 500, tartaric acid 15, acetic acid (96 per cent.) 6. The tartaric acid is dissolved in the solution of aluminium acetate and the resulting solution is evaporated down to 114 parts, and then the acetic acid is added. The mixture is kept in a closed bottle for several days, in a cool place protected from light, shaking occasionally, and then filtered. Sp. gr. 1.260 to 1.263.

**LIQUR CRESOLI SAPONATIS.**—Contains about 50 per cent. of crude cresol  $[\text{C}_6\text{H}_4(\text{CH}_3)\text{OH}]$  1: 3. Linseed oil 120, potassium hydroxide 27, water 41, alcohol 12, crude cresol 200. The solution of the potassium hydroxide in the water is added to the linseed oil, then the alcohol, and the whole frequently shaken and allowed to stand at ordinary temperature until completely saponified. The crude cresol is then added and the whole shaken.

**MEL DEPRATURUM.**—Forty parts of honey are dissolved in 60 parts of water, and 3 parts of kaolin are added (the kaolin is first treated with hydrochloric acid and washed with water to remove the iron present). The mixture is heated on the water-bath for half an hour, then filtered while warm, and the filtrate evaporated on the water-bath till it has a sp. gr. 1.34. To neutralise 10 grams of clarified honey diluted with 50 grams of water not more than 0.4 c.c. of normal solution of potassium hydroxide should be required.

**PASTA ZINCI.**—Zinc oxide 1, wheat starch 1, vaseline 2.

**PASTA ZINCI SALICYLATA.**—Salicylic acid in fine powder 1, zinc oxide 12, wheat starch 12, vaseline 25.

**SOLUTIO NATRII CHLORATI PHYSIOLOGICA.**—Physiological saline solution. Sodium chloride 8 grams, sodium carbonate 0.15 gram, water 991.85 grams. Filter and sterilise in steam.

**TINCTURA CHINÆ.**—Tincture of cinchona is to contain at least 0.74 per cent. of cinchona alkaloids. Prepared by macerating 1 part of coarsely powdered cinchona-bark with 5 parts of alcohol 69 per cent.

**TINCTURA CHINÆ COMPOSITA** contains at least 0.37 per cent. of cinchona alkaloids. Coarsely powdered cinchona-bark 6, coarsely powdered orange-peel 2, coarsely powdered gentian-root 2, coarsely powdered Ceylon cinnamon 1, alcohol (69 per cent.) 50.

**TINCTURA IPECACUANHÆ** contains at least 0.194 per cent. of alkaloids. Coarsely powdered ipecacuanha-root 1, alcohol (69 per cent.) 10.

**TRAUMATICINUM.**—Solution of guttapercha 1 in 9 parts of chloroform.

**UNGENTUM ARGENTI COLLOIDALIS.**—Colloidal silver 15, water 5, benzoated lard 73, yellow wax 7.

**UNGENTUM HYDRARGYRI ALBUM.**—White precipitate ointment, 1 and 9 (white vaseline). The following assay process is described: 5 grams of white precipitate ointment is warmed on the water-bath in a flask containing 25 grams of diluted hydrochloric acid for ten minutes; about 30 c.c. of water is added and the mixture allowed to cool. The solution is transferred to a measuring cylinder of 100 c.c. capacity, the vaselin layer is repeatedly washed with water, and the volume of the solution made up to 100 c.c. with water; 1 gram of potassium iodide is added to 25 c.c. of the above solution, and after solution has been effected, 10 c.c. of solution of potassium hydroxide (15 per cent.), 3 c.c. of solution of formaldehyde, and 10 c.c. of water are added, then after one minute it is acidulated by the addition of 25 c.c. of dilute acetic acid (30 per cent.). The mercury which is precipitated is dissolved in 20 c.c. of N/10 solution of iodine, and the excess of iodine titrated with N/10 solution of sodium thiosulphate, of which 10.1 c.c. should be required [1 c.c. N/10 solution of iodine = (about) 0.01257 gram of white precipitate], using solution of starch as indicator.

**UNGENTUM HYDRARGYRI CINEREUM.**—Mercury ointment should contain 30 per cent. Hg (B.P.: nearly 50 per cent.); mercury 30, wool-fat 5, arachis oil 1, lard 40, suet 24. The mercury is to be extinguished by rubbing with the mixture of wool-fat and arachis oil; the lard and suet, first melted and allowed to cool, are then added. The following assay process is now included: 2 grams of mercury ointment is heated on the water-bath under a reflux condenser with 20 c.c. of crude nitric acid (65 per cent.) for ten minutes; as soon as no more globules of mercury are visible 25 c.c. of water is added and the mixture is heated until the fatty layer separates out clear. After cooling the solution is poured through a pledget of cotton-wool into a measuring cylinder of 100 c.c. capacity, the fat layer is broken and the flask is rinsed four or five times with about 5 c.c. of water; the aqueous solutions are collected, and sufficient solution of potassium permanganate (1 and 999) is added until the red colour remains or brown flakes are precipitated; it is then discoloured by the addition of solution of ferrous sulphate (1 ferrous sulphate, 1 water, 1 sulphuric acid 16 per cent.). The solution is now made up to 100 c.c. by the addition of water; 25 c.c. of the filtered solution is mixed with 2 c.c. of solution of ferric ammonium sulphate [1 in a mixture of water 8, sulphuric acid (16 per cent.) 1], and sufficient N/10 solution of ammonium sulphocyanide is added to produce a brownish-red colouration; at least 15 c.c. of the latter should be required—1 c.c. corresponding to 0.01 gram of mercury. Substantially the same process is used to assay the content of mercury in empl. hydrargyri, and also of mercuric oxide in red mercuric oxide ointment; in the latter case 1 c.c. of N/10 solution of ammonium sulphocyanide corresponding to 0.0108 gram of mercuric oxide.

**UNGENTUM MOLLE.**—Vaseline 1, lanoline 1.

**UNGENTUM PARAFFINI.**—Ceresin 4, liquid paraffin 5, wool-fat 1.

**TURKEY GALLS.**—A Smyrna export house have recently issued a circular on the collection of galls in Asia Minor, in the course of which they point out that the industry has been declining for the past ten years. Formerly the yield varied between 700,000 and 1,000,000 kilos., but the output for 1909-10 was 250,000 kilos. and that for 1910-11 was barely 200,000 kilos. About 60 per cent. consists of green and white, 20 per cent. black, and 20 per cent. small and refuse.

**SOAP IN TURKEY.**—An Ottoman soap company has been formed with an authorised capital of £130,000, in which British finance is interested. A factory has been built at Aivan Serai on the Golden Horn, and the primary object is to manufacture and supply soap of the same quality as that supplied by Crete and Mytilene. Perfumed and other soaps will be produced, and it is also proposed to manufacture glycerin.

## C. & D. Diary Competition, 1911.

### Foreign and Colonial Vote.

THE five questions which we set our subscribers have met with an unusually good response from over-seas, but a greater diversity of opinion has prevailed in the answers than was the case with the home competition, although in the final result agreement is expressed on all questions but one. For the best page advertisement Burroughs Wellcome & Co. (p. 149) head the poll, but Stevenson & Howell, Ltd., and Calox tie for second place, while W. J. Bush & Co., Ltd., Newball & Mason, and A. H. Cox & Co., Ltd., follow in the order named. The most artistic advertisement also proves to be Burroughs Wellcome & Co. (pp. 143-149). W. J. Bush & Co., Ltd., and Stevenson & Howell, Ltd., have each an equal number of votes; then follow Allen & Hanburys, Ltd., and the Standard Tablet and Pill Co., Ltd. The best business-producing advertisement is adjudged to be that of Allen & Hanburys, Ltd. (pp. 161-170), Bernard Slack (p. 116) and Burroughs Wellcome & Co. following. The latter firm are also regarded as the favourite business house, and in this section are placed Allen & Hanburys, Ltd., Evans Sons Lescher & Webb, Ltd., Parke, Davis & Co., C. J. Hewlett & Son, Ltd., F. Newbery and Sons, Ltd., E. Merck, S. Maw, Son & Sons, Southall Bros. & Barclay, Ltd., Baiss Bros. & Stevenson, Ltd., and Sangers. Among the announcements that are missed are those of Burgoyne, Burbidges & Co., May, Roberts & Co., H. Salle & Co., Kodak, F. Stearns & Co., Bowers Bros., W. T. Owbridge, Ltd., and Mace & Haldane.

### The Prizewinners.

No competitor succeeded in answering the five questions correctly, and only one was fortunate enough to get four answers right. We accordingly award this competitor,

Mr. Lennox Tice, 819 Second Street, Edmonton, Alberta, Canada, the sum of 10s. 6d., and to six others who answered three questions correctly we give 5s. each. They are:

Mr. Behary Lall Bysack, 80 Nemoo Gossam's Lane, Beadon Sq., P.O., Calcutta.

Mr. H. E. Grimshaw, Simonstown, South Africa.

Mr. Fritz Mentzel, c/o the Farbenfabriken, Leverkusen, Mulheim, a/R, Germany.

Mr. H. A. Renwick, Chard Street, Burwood, New South Wales.

Mr. Thos. Russell, Upper Symonds Street, Auckland, N.Z.

Mr. James B. Smith, P.O. Box 7, Antigua, West Indies.

### SYNTHETIC SENTENCES.

THE CHEMIST AND DRUGGIST is the best trade paper.—W. E. Metcalfe (Shipley).

It is quite possible to bring any and every form of competition into disrepute.—Wm. Domaille (Bristol).

Preparations manufactured by Bayers are the best, and are guaranteed to be of the finest quality.—Reginald B. King (Beaminster).

Guaranteed protected profit against cutting has proved one of the best chemists' hints for many years.—J. Lightbourne (Tenby).

Human assistants were not intended by their Creator to work all the time.—A. E. Warden (Mitcham).

That efficiency can only be gained by continuous application and attention is an undeniable fact.—Wm. Nimmo (Sunderland).

Chemists, remember the "genuine" opposite eau de Cologne is unsurpassed; always reliable, excellent value, will pay you best.—W. Blackall (London).

The Buyers' Guide should be used by all pharmacists when they are in need of anything.—Robert Rowe (Waterloo).

A Cook without Browning is like a King on the Field of Battle without his Armour.—H. M. Thompson (Southampton).

Chemists, opticians, and mechanics will help business by advertising in the *Chemists' and Druggists' Diary*, 1912.—Wm. Francis Hackney (Holborn, E.C.).

There are many chemists who find, through adopting modern methods of trading, their businesses have increased.—David R. Buller (Dundalk).

A pill in time saves nine.—Arthur Thomson (Wandsworth). Efficiency is the general order of the day. The whole world testifies to its powers.—Leo. Middleton (Sheffield).

Arrange an attractive window-display of your own preparations. It quickly repays your time and trouble.—Geo. C. Law (Plymouth).

In all things consider your incomplete knowledge, and gladly take every opportunity to be taught.—Fred Orchard (Highbridge).

To be progressive and secure of success, read THE CHEMIST AND DRUGGIST—no more, or less.—J. T. Walters (13 Old Street, E.C.).

Many pharmacists have secured new and lasting customers by knowing or having what others did not.—W. E. Gaze (Highams Park).

Attractive advertising, best terms, elegant style of packing, originality are all essential for success in business.—J. A. Hayes (Chelsea, S.W.).

Knowledge is power. You can obtain knowledge from THE CHEMIST AND DRUGGIST, the best chemists' paper.—H. W. Watson (Leeds).

Read medical attack on the prescriber-chemist in recent Blue-book and "keep your powder dry."—Wm. Crozier (Monkwearmouth).

An attractive pharmacy, a pleasant address, reliable stock, and original advertising are indispensable to up-to-date pharmacists.—A. Marsland (Ashton-under-Lyne).

THE CHEMIST AND DRUGGIST is the best advertising medium for the trade in all its branches.—Fanny Wells (Ilford).

Advertising in CHEMIST AND DRUGGIST repays you well, so does always selling best quality of goods.—M. W. Twiddell (Jarrow).

It is the most advantageous method to stock your window with attractive and well-advertised specialities.—T. W. Partidge (Darjeeling, Bengal).

The size of the *Diary* is a proof of its sterling value to buyers and advertisers.—John J. Wittin (Sunderland).

### Prizewinners.

The Synthetic Sentence competition has again proved to be interesting to those who have participated in it, and there is considerable difficulty in confining the awards to the promised six, that being the number of half-guineas offered. After full consideration the coins are awarded to the following:

I consider your advertisement pages absolutely essential to keen buying; an important factor in success to-day.—J. Barker, chemist, 63 Devona Road, Leicester.

If an elegant pharmacist you would be, use sense and science and your C. & D.—W. G. Brooks, 17 St. Stephen's Road, Leicester.

This interesting competition further increases the pleasure of thoroughly reading *The Chemists' and Druggists' Diary* advertisements.—D. Caruana, 129 Strade San Domenico, Valetta, Malta.

The Buyers' Guide should be used by all pharmacists when they are in need of anything.—Robert Rowe, 10 Wesley Street, Waterloo, near Liverpool.

The wholesale houses who do not advertise in THE CHEMIST AND DRUGGIST lose many valuable orders.—Edwin Stubbs, Acocks' Green, Birmingham.

Is it too much to say that reading the C. & D. is as essential as the Minor?—A. L. Blair, 147 Victoria Road, Woodstock, South Africa.

The following six we judge worthy of a prize of 5s. each:

The royal road to success is only attained by the constant study of scientific methods.—J. Duncan, Grosvenor Street, South Yarra, Victoria, Australia.

To secure your customers' confidence in your pharmacy demand ideal quality—it is the best policy.—Fred. T. Holmes, Launceston, Tasmania.

He is a very smart chemist who can supply every little thing his customers ask for.—J. C. Thackray, c/o V. Strawsen, 23 Moss Street, Liverpool.

The C. & D. is the best advertising medium for the drug trade. Every chemist should have it.—The Scotch Pharmacy, 41 and 43 Sanferando, Trinidad, B.W.I.

I welcome the arrival of *The Chemists' and Druggists' Diary* more than any other book published.—A. A. Simpson, Kensington, Sydney, N.S.W.

The value of publicity cannot be overlooked by businessmen, and it is obtained by advertising.—Wm. H. Pearce (Camberwell, S.E.).

# COLONIAL AND FOREIGN NEWS.

THE PHARMACEUTICAL CONDITIONS IN BULGARIA are by no means rosy, and the existing dearth of assistants is likely to increase in consequence of the recently introduced higher preliminary educational demands exacted from intending pharmacists. Hitherto an apprentice could only serve in a pharmacy where a qualified pharmacist was employed in addition to the owner. The Sanitary Council now proposes that an owner working alone will be allowed to keep an apprentice, provided that he makes up at least 6,000 prescriptions, while concessions are to be granted for each 5,000 inhabitants yearly, instead of 8,000, so that a number of new concessions will be waiting for applicants. It may be mentioned that in Bulgaria a drug-store may only be opened in a place possessing at least two pharmacies, and that the owner must be a qualified pharmacist.

CHEMISTS' PRICES IN ITALY.—An official tariff of prices for medicines dispensed is in force in Italy, and a revision of it according to the new edition of the Italian Pharmacopoeia has been issued by the Minister of the Interior. The tariff is to be regarded as the maximum amounts that may be charged, but regulations are included regarding the charges in the case of prescriptions made up on behalf of paupers, hospitals, and other charitable institutions. In these cases the pharmacist has to deduct a certain percentage, based on the annual total amount paid to him by such institutions. Thus, if the total does not reach 40%, a rebate of 15 per cent. must be allowed; if between 40% and 200%, 20 per cent.; between 200% and 400%, 25 per cent.; and if over 400%, 30 per cent. In the case of prescriptions dispensed after the pharmacy is closed at night, the pharmacist is entitled to make an extra charge of 50 per cent. Diphtheria antitoxin must be sold by him at the price at which it is supplied to him. The following are a few of the charges enumerated in the tariff:

## Manipulations.

For making cachets, each ... ..	d.
A decoction up to 100 grams ... ..	$\frac{1}{4}$
An emulsion up to 100 grams ... ..	2
Pills, including the excipient, each up to 20 ... ..	4
Ointments up to 30 grams ... ..	$\frac{1}{2}$
Suppositories, each up to 6 ... ..	2
Solutions up to 200 grams ... ..	1
For mixing two or more powders ... ..	2
For mixing liquids ... ..	2
	1

## Preparations.

	100 grams	10 grams	1 gram	0.1 gram	0.01 gram
—	s. d.	s. d.	s. d.	s. d.	s. d.
Caffeine ... ..	—	1 8	0 3	0 1	—
Ext. cascarr. sagrad. liq. ... ..	—	0 5	0 1	—	—
Glycerin ... ..	0 6	0 1	—	—	—
Morphinhydrochlor. Ol. morrhuae ... ..	—	—	1 3	0 3	0 0½
Potass. bromid. ... ..	0 6	0 1	—	—	—
Syr. aurant. ... ..	1 8	0 3	0 1	—	—
Tr. opii ... ..	0 6	0 1	—	—	—
Ung. zinci ... ..	—	0 4	0 1	—	—
Blaud's pills: 10=2½d. 100=1s. 8d.	0 8	0 1½	—	—	—

SOAP AND PERFUMERY IN DOMINICAN REPUBLIC.—The manufacture of soap has become one of the first industries in the Dominican Republic. Two factories, one in Puerto Plata and one in Samana, have been in operation for about twenty years. While there is a protective import tariff on soap, there are also import duties on the raw materials and a local stamp-tax on the finished product. In 1909, however, the output of the local factories amounted to 1,250,000 lb., the wholesale value of which was \$300,000. This includes common laundry-soap and many varieties of scented and unscented toilet-soaps. The entire product is consumed in the Republic. Each factory pays an annual

licence of \$365. In addition to the duties on raw materials and the licence for operating, there is a national stamp-tax on the finished product of  $\frac{1}{8}$  c. per lb. on common soap,  $\frac{3}{4}$  c. per lb. on scented common soap, and 1c. per tablet on fine toilet-soap. In addition to soaps, many varieties of toilet-powders and perfumes were manufactured by these factories until 1905, when a revenue Act passed by the Dominican Congress practically forced the local products off the market. Until recently the imported toilet articles could undersell those manufactured in the Republic. The manufacturers are now hopeful that the Act of September 1910 placing heavy import duties on powders and perfumes will enable them to put these articles again on the market.

## DEMERARA DOINGS.

QUININE AND PATENT MEDICINE DUTIES.—At the last meeting of Parliament the Government passed a measure abolishing the duty on quinine. It is also proposed to put a tax on all patent medicines. The matter will probably be decided during April.

PERSONAL.—Mr. B. Thompson, proprietor of Messrs. J. D. Alty & Co. until the end of 1909, when the business was bought up by Messrs. Smart-Dalglish & Co., Ltd., and since then manager of this business for them, has left their service. He intends leaving for the old country at an early date. Mr. Thompson, who went out about 35 years ago, has during late years taken an active part in the municipal life of Georgetown.

A NEW DRUG STORE.—Limited companies are the order of the day in British Guiana, and our photograph shows the interior of the most recent addition to drug stores of the colony, that of Booker Bros., McConnell & Co., Ltd.,



Georgetown, who have opened a drug department at their large general store. All the fittings were made of wood grown in British Guiana, worked by colonial workmen, who have creditably accomplished their task. The department is under the control of Mr. W. Ault, who made a hurried trip home to do all the necessary buying. The supplies to estates and other wholesale orders are filled in a special department for this heavy trade, the estates work being a fairly large item in Demerara.

FOOTBALL.—Teams representing Messrs. Smart-Dalglish & Co., Ltd., chemists, Georgetown, and Messrs. "Bookers" met in a friendly game of football on the Georgetown Football Club's ground, Bourda, on March 28. The Smart-Dalglish team was as follows: Mendonca; McRostie, Margach; Hutchison, Bayley, Braggins; Levy, Hardy, McCowan, Thomas, Roberts. During the first half the game was fast, but the interval was reached without any scoring. On resuming the chemists were aggressive, but the "Bookers" were the first to score. This reverse roused the pill men, and Thomas equalised from a scramble in the goal mouth. The outcome of the game is that the "Smart-Dalglish" Football Club has been formed. Mr. Alex. McCowan is captain.

## SOUTH AFRICAN NEWS.

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in British South Africa, as well as to other chemists in business there.

### Cape of Good Hope.

ALFRED BIRD & SONS, LTD., Birmingham, England, will apply on May 4, 1911, to register a label design covering jelly in powder form (Class 42).

### Rhodesia.

CRICKET MATCH.—A match was played at Buluwayo, on Sunday, March 12, between the chemists' eleven and the King's Club second eleven. King's proved the victors by 12 runs, making 89 as against the chemists' 77. The principal scores for the chemists were, Travis 21, Dickenson 16, and Willing 12.

A SNAKE STORY.—Mr. J. W. Willing, on the staff of Messrs. Lennon, Ltd., took part in an interesting incident a few days ago. He and a number of friends were on a shooting expedition in the Khami district. Mr. Willing was successful in an overhead shot, the bird, which was about the size of a pheasant, falling about forty yards from the party. Mr. Willing immediately ran forward, but found to his surprise that there was no sign of the bird. Looking about he was startled to find a python lying in the shade of a bush, and by the appearance of a big lump on the neck he saw that the python had swallowed what afterwards proved to be the bird Mr. Willing shot. This incident is interesting owing to the fact that the python is generally supposed to be a very slow-swallowing reptile, and a hot discussion on the subject is taking place in the local press.

### Transvaal.

CUSTOMS REBATE.—The Governor-General of the Union in Council has approved of regulations for a rebate or refund of the duty on any raw, semi-manufactured, or manufactured material used in the manufacture of explo-

TARIFF INTERPRETATION.—The following tariff interpretations have been published in the "S.A. Union Gazette" for general information:

Article.	Rate.	Rebate of U. K. Manufactures.
Carbolacene, a fluid disinfectant soap	Per 100 lb. 4s. 9d. (or 25 per cent. <i>ad valorem</i> which-ever shall be the greater)	7d. per 100 lb. or 3 per cent. <i>ad valorem</i> as the case may be.
Chicken meal, a mixture of crushed biscuits, broken peas, broken oyster shells, etc.	Per 100 lb. 15s.	3 per cent. <i>ad valorem</i> .
Saccharolate, a washing and disinfectant fluid	Per 100 lb. 4s. 9d. (or 25 per cent. <i>ad valorem</i> which-ever shall be the greater)	7d. per 100 lb. or 3 per cent. <i>ad valorem</i> as the case may be.
Ayers' Sarsaparilla and Cherry Pectoral, when containing less than 3 per cent. of proof spirit and having a <i>bona fide</i> formula on the bottles	Per 100 lb. 15s.	3 per cent. <i>ad valorem</i> .
Guyucose (Guaiacose), medicinal preparation, having a <i>bona fide</i> formula on the bottle, and containing less than 3 per cent. of proof spirit	Per 100 lb. 15s.	3 per cent. <i>ad valorem</i> .
Monusk, a washing or soap powder	Per 100 lb. 4s. 9d. (or 25 per cent. <i>ad valorem</i> which-ever shall be the greater)	7d. or 3 per cent. <i>ad valorem</i> as the case may be.

NOTE.—On pages 263 and 264 of the Official Customs Tariff Book, the following have been added to list of approved disinfectants: Hayward's Carbolic Disinfectant Powder. "Hohmsol" Disinfectant. Jeyes' Corporation Fluid.

CHEMISTS' ATHLETIC CLUB.—The members and friends had a very enjoyable outing at Craigshall on March 19. The sports included boating, tennis, and a cricket match, the latter being captained on one side by W. J. Smith and on the other by H. H. Burrows; the Smith side eventually



JOHANNESBURG CHEMISTS' ATHLETIC CLUB PARTY.

sives within the Union of South Africa, when such explosives are exported beyond the limits of such Union, Southern Rhodesia, North-Western Rhodesia, Basutoland, the Bechuanaland Protectorate, and Swaziland.

STRYCHNINE POISONING.—A medical man practising in the Kroonstad district gave a lady strychnine whereas he intended to give her butyl chloral hydrate. The lady died, and the doctor said in course of evidence, "When I returned for the stomach pump I saw I had made a mistake." The inquest was postponed pending the arrival of the analysis of the stomach from Bloemfontein. The medicine that was left was taken charge of by the district surgeon, Dr. W. E. G. Duthie.

won by three runs. Lunch was partaken of at the hotel, and was presided over by Mr. W. B. Marshall, president of the Club. The committee to whose efforts the success of the picnic was due consisted of Messrs. Hetherington, J. N. Jones, Mills, Whieldon, and King. A photo of the picnickers is reproduced.

ABSENT-MINDED PROFESSOR.—"This afternoon, gentlemen, we proceed to a general study of the Vertebrata, and in order that my meaning may be quite clear to you, I have brought with me a dissected frog, to which I shall from time to time draw your attention." (After opening a paper parcel containing two sandwiches and a hard-boiled egg :) "But surely I have had my lunch."

## How to Fight Company Competition.

**"Pharmacist" is now in a position to tell how he has done it successfully.**

WHEN the dread announcement reached our town that Messrs. Cash & Co., the largest, best, and cheapest chemists in the world, had taken premises with a view to opening another branch, I was perturbed; more so when I discovered that the premises taken were within a few doors of my own pharmacy. What was to be done? Over a pipe that night I began to look the situation in the face, and I went to bed with a mighty resolve that I would not be snowed under, but that every ounce of grit and brains should be used to fight the new comer, and thus do something, if possible, to improve my own position.

In a day or two I made up my mind to pay a visit to an old apprentice of mine who was successfully managing a Cash & Co. branch in a distant town. In a few hours I was talking matters over with my quondam pupil, told him of my difficulties, and, after putting before him the whole situation, I summed up by asking.

"WHAT WOULD YOU DO IF YOU WERE IN MY PLACE?"

"Why, surely," said the thoughtful young manager, "you are not going to get into a blue funk because Cash & Co. are to open a few doors off? Pardon me, sir, you of all men, with your local knowledge, your unlimited number of friends, your enterprise, and your brains! Why, sir, if the shop next door to this was to let, I would take it and fight them, and I know I could make a good living for myself." "Great Scott!" thought I—"a stripling to talk like this, and a veteran like myself half inclined to show the white feather!"

After a pause my former apprentice said, "Of course, you must study and find out why Cash & Co. are so successful. Cash's are a splendid organisation: up-to-date methods, pure drugs of unvarying excellence and guaranteed purity, choice perfumery and toilet-requisites of unexcelled quality; prescriptions charged at moderate rates; wonderful value in toilet-soaps and dentifrices; and, of course, a magnificent lot of proprietaries. Last, but not least, patent medicines at rock-bottom prices. In short, you must throw over much of your old system of business."

My time was up. I had to catch my train, and on the homeward journey had the carriage all to myself, which gave me time to do a bit of clear thinking. I resolved then and there to adopt as

### MY FIRST LINE OF DEFENCE AND ACTION

a better system with my cash and accounts. I remembered that I had had one or two unsatisfactory interviews with the Surveyor of Taxes. In a nutshell, my scheme was to adopt a new cash-book with columns on the debtor side for debtor ledger, expenses ledger, discounts, bank, and cash sales, and the credit side ruled with columns to balance. This cash-book I balanced daily—a task which was not difficult, because I paid into bank every day the whole of the receipts, however small they might be. Again, I had a new Expense Ledger, and it became a revelation to me what one pays for string, wrapping-paper, patent-medicine stamps, and other small things in a year. When they are tabulated you know. The new Bought Day Book was posted monthly, and its columns were Drugs, Patent Medicines, Druggists' Sundries, Proprietary Articles, Mineral Waters, Perfumery, Surgical Appliances, Printing, and Medicated Wines—a vital necessity in this form of day book, if one does a large trade in patent medicines. Again, so much is put weekly into a cash-box for petty cash payments for sundries, such as stamps, returns, carriage, etc. I also have stock-taking every year, and when the extensions of stock-books are complete a Profit and Loss account is prepared every year. If Messrs. Cash & Co., the Largest, Best, and Cheapest Chemists, had done nothing else, they have forced me to adopt a method of trading which keeps me calm inwardly month after month. While purchasing these new books I bought the latest loose-leaf

ledger, which is a great boon. For my cash, I purchased on the instalment system one of the National Cash Register Co.'s tills.

All that I have written may seem commonplace. It is vital. I said that the first recommendation of my friend the manager was organisation. I began by a drastic reorganisation of receipts and payments. My next point was to

### REORGANISE THE SHOP AND WAREHOUSE.

Accordingly, I consulted a firm who make a speciality of shop-fitting, and they prepared a plan by which, working in sections, the whole shop would be transformed, as I had not the means to spend the entire sum required at a stroke. Behind good plate-glass cameras, boxes of toilet-soap, manicure sets, etc., look inviting, and are half sold. To-day I can look at my establishment with an inward glow of satisfaction, and I must here confess if the Largest, Best, and Cheapest Chemists in the World had not come to our town this complete change would never have taken place.

The next step in the way of organisation was to

### ALTER PRICES FOR ALL ARTICLES.

I must confess having been trained in the old-fashioned way in select pharmacies this was my stiffest fence to climb. I began to ask myself, Would the public really appreciate drugs and medicines at much reduced prices? Fortunately, I made up my mind to become a whole-hogger in this respect. Accordingly, I abandoned the old practice of a certain price for one class of customer, and a lower price for a stingier kind of customer; in a word, fixed price for everything became the rule. For instance, I had for years been getting a penny an ounce for boracic powder; this was instantly changed to 2d. for 4 oz. Another line: I sold formerly a 10-oz. panelled bottle of quinine wine for 1s. I now buy 30 gals. of B.P. quinine-wine, run it off into champagne quart bottles, put a smart label on, and sell at 1s. 1d. My quinine-wine trade has quadrupled. Looking at it impartially from the chemist's point of view, and the public's point of view, I really think that, on the whole, Cash & Co.'s prices are fair and reasonable.

### HOW I GOT PROPRIETARY BUSINESS.

My next step in reorganisation was to look at my lines of proprietary articles, and compare them in value with Messrs. Cash & Co.'s proprietaries. Let me confess, I felt beaten. I then determined to study the price lists and catalogues of wholesale houses for packed proprietaries. I also found the issues of THE CHEMIST AND DRUGGIST a mine with a wealth of information. Having carefully studied these lists of the wholesale houses, I resolved to pay a personal visit to one of the firms. Having had an interview with one of the partners, I was introduced to the manager of their counter adjuncts department. A quarter of an hour's talk with this man of expert knowledge at the heart of things was a liberal education. From the suggestions, the hints, the ideas I gathered I made up my mind to place a large order with this enterprising firm, whose existence as packers I had gleaned from the *C. & D.* In course of time sketches of new labels, sample bottles of my old proprietaries, old wine, as it were, in new bottles were submitted, and after due consideration adopted. To-day I wonder that I should have been so foolish as to be wasting my precious time helping to shake a 2-gal. jar of Cod-Liver Oil Emulsion. Of course, I had to scrap all my old labels and cartons; this also gave me a pang at first, but if a man is going to be an out and out competitor with the Largest, Best, and Cheapest Chemists in the World, or even a twentieth century trader, he must, like our friends across the herring pond, be prepared to scrap old ideas.

Let me say this, you must

HAVE CONFIDENCE IN YOUR WHOLESALE HOUSE, and be prepared to consult with their representative if he has your confidence, and I have found the majority of representatives good sportsmen. This also implies that it is necessary to pay an occasional visit to headquarters to consult our friend the manager of the counter adjuncts department. Care, of course, ought to be taken to write the wholesale house a few days in advance making an appointment. No use of taking offence if you pay a casual visit, and you are not received with due ceremony like an Indian Rajah. Wholesalers are busy men, and their time is exceedingly precious. Reverting to travelling representatives, there is surely, in these days of refinement and education, no need of discussing the affairs of your neighbours and competitors. I have always found it good policy to be on good terms of friendship with my competitors. By this time I am, of course, very friendly with Messrs. Cash & Co.'s managers in the town, and they have frequently obliged me.

The next point in organisation necessitated the classification of everything with an index number, so that the stare and look of astonishment would be lacking when an article not in everyday demand was asked for. It seems almost absurd to mention it, but the *sine qua non* of our business is the Want Book, which is the compass which guides the ship. The Want Book should have four columns—Drugs, Sundries, Patents, and Various—and every night this book must be methodically dealt with. Nothing tends to spoil a business and to bring about deterioration quickly than to tell a customer you are out of so and so, and hope to have it in a couple of days. This makes your customer discontented, and a discontented customer is frequently a lost one. This is one of Cash & Co.'s strongest points, a well-assorted stock, and at least one or two of every article in demand.

#### A WORD OR TWO ABOUT SUBSTITUTION.

This is a dangerous practice in the hands of ignorant persons. Some clients are so timid that rather than argue and decline before a shopful of customers they will take the "just as good" article. It must be borne in mind that the great majority of people in these days know what they want when they come to buy, and expect to get it. I know that when I go to the hosier's for a dark purple necktie with a small white spot, I expect to get it, and if the polite shopman tries to sell me a pink or yellow tie I feel my gorge rising. The local chemist must have a great pull because of his local knowledge, and if we traders supply as well as the Largest, Best, and Cheapest Chemists, sentiment does count, and one's friends can be depended upon. Again, One's personality is a valuable asset. I have observed people go to Cash and Co. for a bottle of Scott's Emulsion, and a second or two later call at my place for a bottle of cascara or castor oil. The pharmacist must, of course, keep up his reading. He must study his trade journals. He must carefully study the uses of newly advertised preparations. The pharmacist has very special opportunities for co-operating with the medical profession, and he ought, if he lives in anything like a decent district, to get the doctor's orders for douches, abdominal belts, trusses, bed-pans, and the like. The fact is, the pharmacist's own ignorance is his real enemy, not the Largest, Cheapest, and Best Chemists in the World. It is perhaps superfluous to add that the pharmacist's windows ought to be made a matter of careful study. If the shop has two windows, change one window a week. The windows ought to be scrupulously clean, and good attractive show-cards should be used to set off the articles displayed. A *sine qua non* is to have the articles distinctly price-marked. The time has gone by for the pharmacist to stand in a lofty dignified way behind the counter. He must ever remember he is there to sell stuff. The whole of this article can be summarised thus:

- (a) Reorganisation of receipts and payments.
- (b) Refitting and modernising the shop.
- (c) Alter the prices of goods to meet competition.
- (d) Up-to-date proprietaries.
- (e) Proper shop classification with card index.
- (f) Keep up one's reading.
- (g) Co-operation with medical profession.

And any pharmacist who follows, or is carrying out, these recommendations has very little to complain about.

Dispensing the pharmacist surely ought to retain. Let him use distilled water, best quality bottles, and, if possible, have the dispensing department away from the main shop, and let a thorough system of checking each prescription be adopted. Now, having got everything in order, I come to my last point,

#### ADVERTISING.

Not until the chemist is really trying to carry out recommendations similar to the foregoing ought he to spend a copper in advertising. An advertisement in the local paper, with good house-to-house distribution of well-printed leaflets six times a year, will bring certain results. If the pharmacist is advertising patent-medicines he ought to have one of his windows filled with the selected articles he is advertising, with, as before stated, bold price tickets thereon. The trade to be done in toilet-soaps by the pharmacist through choice window displays is enormous. Advertising ought to be free from vulgarisms or exaggeration, and certainly not the remotest allusion to a competitor. Well, then, what is the conclusion of the whole matter? Let Messrs. Cash & Co. flourish. They have stimulated me to higher effort, they have put me upon my mettle, they have made me think. And my business? How much brighter and better! It is well organised, and certainly more agreeable methods of business are the result.

## NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Chapman, W. G. *Continental Price Calculator; for Conversion of English Prices into their Foreign Equivalents at Current Rates of Exchange.* 6½×4. Pp. 118. Leather binding. 5s. net. (Wilson, 54 Threadneedle Street, London, E.C.) [Contains tables giving the equivalent of English money in francs, liras, pesetas, marks, kronen, florins, kronor, and dollars; the equivalent of prices per lb. into kilos, in foreign money, yards into metres, avoirdupois pounds into kilograms, English feet into metres, and square feet into square metres. A feature of the money-tables is that fluctuations in exchange are taken into account, so that exact equivalents can be given for amounts from 1/10th of a penny to 5s.]

Dutton, T. *Indigestion.* 7th edit. Cr. 8vo. 1s. 6d. net. (H. Kimpton.)

Ferguson, A. *The Buyers' and Sellers' Guide to Profit on Return*, showing at one view net cost and return prices, to facilitate purchases and sales at the respective rates per cent. With a table of discount. 18th edition. 6½×8½. Series of tables. 1s. net. (Wilson, 54 Threadneedle Street, London, E.C.) [The tables have been calculated on the principle of profit on return, and are arranged on a simple plan. All that is necessary is to turn to the cost figure, and opposite it will be found the required rate of profit at various percentages. The discount table at the end is a useful one.]

Herzog, M. *Text-book on Disease-producing Micro-organisms.* 8vo. 21s. net. (Baillière.)

Horne, D. W. *Weather Instruments and how to Use Them.* Cr. 8vo. Pp. 48. Swd. 6d. net. (Witherby.)

Linn, T. *Health Resorts of Europe.* Edited by A. C. Glynn Grylls. 18th edit. 6½×4½. Pp. 235. 2s. 6d. net. (Reynolds-Ball's Guides.)

Murray, J. A. *Economy of Food: A Popular Treatise on Nutrition, Food, and Diet.* 7½×5. Pp. 266. 3s. 6d. net. (Constable.)

*The Inspectors' Weights and Measures Handbook for 1911.* 5½×2½. Pp. 424. 2s. 3d. net. (Incorporated Society of Inspectors of Weights and Measures, Watford.) [A nicely produced pocket-book with diary pages, containing also information regarding the Incorporated Society of Inspectors of Weights and Measures; the Weights and Measures Regulations (well indexed); stamping and adjusting fees; metric equivalents; summary of appeal cases; directory of inspectors, and much matter of a kindred nature. A pocket-book useful also to scale-users because of the way in which the various regulations are brought together.]

Wiley, H. W. *Foods and their Adulteration.* 9½×6. Pp. 654. 21s. net. (Churchill.)

## Canadian Formulary.

### New Recipes and Alterations.

**A**S recently intimated in the *C. & D.*, the third edition of "The Canadian Formulary of Unofficial Preparations" has been published by the authority of the Ontario College of Pharmacy, and has been approved and adopted by the Canadian Pharmaceutical Association. It is published by the College at 50 cents. The Second Edition contained 149 formulas, and the third 163. We subjoin those that are new, and add notes on important changes on the older formulas:

#### ELIXIR PEPSINI BISMUTHI ET STRYCHNINÆ.

*Elixir of Pepsin, Bismuth, and Strychnine.*

Solution of strychnine (B.P.)	...	176 minims
Elixir of pepsin and bismuth sufficient to make	...	20 fluidounces 1000 c.c.

Mix them, and if the elixir shows an acid reaction to blue litmus, add solution of ammonia cautiously until the reaction is neutral.

Note.—Each fluidrachm contains 1/100 grain strychnine hydrochloride.

#### EXTRACTUM SERPYLLI LIQUIDUM.

*Liquid Extract of Wild Thyme.*

Wild thyme, in No. 40 powder	...	20 ounces 1000 Gm.
Glycerin	...	3 fluidounces 150 Gm.
Alcohol 95 per cent., and water, of each sufficient to make	...	20 fluidounces 1000 c.c.

Follow the instructions given under Extractum Thymi Liquidum, and continue the percolation process, in the usual manner, to make 20 fluidounces (1000 c.c.) of liquid extract.

#### EXTRACTUM THYMI LIQUIDUM.

*Liquid Extract of Garden Thyme.*

Garden thyme, in No. 40 powder	...	20 ounces 1000 Gm.
Glycerin	...	3 fluidounces 150 c.c.
Alcohol 95 per cent., and water, of each sufficient to make	...	20 fluidounces 1000 c.c.

Mix the glycerin with 4 fluidounces (200 c.c.) of alcohol and 7 fluidounces (350 c.c.) of water. Moisten the powder with 9 fluidounces (450 c.c.) of the mixture, and set aside in a covered vessel for twelve hours. Then pack the moistened drug firmly in a cylindrical percolator, and add the remainder of the mixture, and follow with a menstruum of alcohol, one volume, and water, two volumes. Continue the percolation process in the usual manner, to make 20 fluidounces (1000 c.c.) of liquid extract.

#### LOTIO SULPHURIS COMPOSITA.

*Compound Sulphur Lotion.*

Zinc sulphate	...	600 grains 34 Gm.
Sulphurated potash	...	600 grains 34 Gm.
Precipitated sulphur	...	600 grains 34 Gm.
Glycerin	...	10 fluidrachms 32 c.c.
Distilled water	...	20 fluidounces 500 c.c.
Rose-water sufficient to make	...	40 fluidounces 1000 c.c.

Dissolve the zinc sulphate in 10 fluidounces (250 c.c.) of distilled water and filter. Dissolve the sulphurated potash in 10 fluidounces (250 c.c.) of distilled water, and filter. Mix the two solutions by slowly pouring the solution of zinc sulphate into the solution of sulphurated potash. Triturate the sulphur with the glycerin, then gradually add under constant trituration the foregoing solution and sufficient rose-water to make 40 fluidounces (1000 c.c.).

#### PARAFFINUM COMPOSITUM LIQUIDUM.

*Compound Liquid Paraffin.*

Camphor	...	30 grains 3.4 Gm.
Menthol	...	8 grains 1.0 Gm.
Thymol	...	4 grains 0.5 Gm.
Eucalyptol	...	8 grains 1.0 Gm.
Oil of wintergreen	...	30 grains 3.4 Gm.
Hydrastine	...	1/8 grain .015 Gm.
Liquid paraffin (colourless) sufficient to make	...	20 fluidounces 1000 c.c.

Mix intimately to make a homogeneous liquid.

#### SYRUPUS PRUNI VIRGINIANÆ CUM OLEO MORRHUÆ ET MALTO.

*Syrup of Wild Cherry with Cod-liver Oil and Malt.*

Cod-liver oil	...	10 fluidounces 250 c.c.
Extract of malt	...	10 fluidounces 250 c.c.
Glycerin	...	2 fluidounces 50 c.c.
Powdered acacia	...	2 ounces 50 Gm.
Oil of peppermint	...	30 minims 1.5 c.c.
Syrup of wild cherry sufficient to make	...	40 fluidounces 1000 c.c.

Triturate the oils with the powdered acacia until a homogeneous mixture results; then add, all at once, 12 fluidounces (300 c.c.) of syrup of wild cherry and stir briskly with the pestle until the mixture is a perfect emulsion. Mix the extract of malt, glycerin, and 5 fluidounces (125 c.c.) of syrup of wild cherry, and add gradually, under constant stirring, to the emulsion, and finally, if necessary, sufficient syrup of wild cherry to make 40 fluidounces (1000 c.c.).

#### SYRUPUS SULPHATIS COMPOSITUS.

*Compound Syrup of Sulphates.*

*Compound Syrup of Magnesium, Iron, and Manganese Sulphates.*

Magnesium sulphate	...	5 ounces 250 Gm.
Ferrous sulphate	...	80 grains 9.2 Gm.
Manganese sulphate	...	40 grains 4.6 Gm.
Dilute sulphuric acid	...	400 minims 41.6 c.c.
Solution of carmine	...	100 minims 10.4 c.c.
Syrup of lemon sufficient to make	...	20 fluidounces 1000 c.c.

Powder the salts and dissolve them in the syrup of lemon to which the dilute sulphuric acid has previously been added; finally add the solution of carmine, and filter if necessary.

#### SYRUPUS THYMI COMPOSITUS.

*Compound Syrup of Thyme (B.P.C.).*

Liquid extract of garden thyme	...	2 fluidounces 100 c.c.
Liquid extract of wild thyme	...	2 fluidounces 100 c.c.
Alcohol (90 per cent.)	...	1 fluidounce 50 c.c.
Potassium bromide	...	400 grains 44.5 Gm.
Simple syrup	...	15 fluidounces 750 c.c.
Distilled water sufficient to make	...	20 fluidounces 1000 c.c.

Dissolve the potassium bromide in 1 fluidounce (50 c.c.) of distilled water. Mix the alcohol, liquid extracts, and syrup; then add the potassium-bromide solution and sufficient distilled water to make 20 fluidounces (1000 c.c.).

Note.—Each fluidrachm contains 2½ grains of potassium bromide.

#### TINCTURA SAPONIS VIRIDIS.

*Tincture of Green Soap. Liniment of Soft Soap.*

Green soap	...	12 ounces 600 c.c.
Oil of lavender	...	200 minims 20 c.c.
Alcohol (95 per cent.)	...	10 fluidounces 500 c.c.
Distilled water sufficient to make	...	20 fluidounces 1000 c.c.

Mix the oil of lavender with the alcohol, add the green soap and macerate for forty-eight hours, agitating occasionally. Then filter and pass enough water through the filter to make 20 fluidounces (1000 c.c.).

#### UNGUENTUM CAPSICI COMPOSITUM.

*Compound Capsicum Ointment (Unguentum Calefaciens).*

Oleoresin capsicum	...	2 fluidrachms 16 c.c.
Croton oil	...	1 fluidrachm 8 c.c.
Camphor (in powder)	...	240 grains 16 Gm.
Oil of turpentine	...	1 fluidounce 32 c.c.
Oil of cajuput	...	4 fluidrachms 16 c.c.
Oil of cloves	...	2 fluidrachms 8 c.c.
Oil of wintergreen (synthetic)	...	2 fluidrachms 3 c.c.
Beeswax (yellow)	...	1 ounce 32 Gm.
Soft paraffin (yellow)	...	16 ounces 500 Gm.

Melt the beeswax, add the soft paraffin, and continue the heat, if necessary, until the latter liquefies; then add the remaining ingredients, which have been previously mixed together; then strain through muslin, and stir until it begins to congeal.

#### UNGUENTUM MENTHOLIS COMPOSITUM.

*Compound Menthol Ointment.*

Hydrated chloral	...	160 grains 12 Gm.
Menthol	...	320 grains 24 Gm.
Oil of wintergreen	...	320 grains 24 Gm.
Hydrous wool-fat	...	4 ounces 125 Gm.
Soft paraffin (white) sufficient to make	...	16 ounces 500 Gm.

Dissolve the hydrated chloral and menthol in the oil. Melt together, at a moderate heat, the hydrous wool-fat and soft paraffin, then add the above solution and stir constantly until it congeals.

## UNGENTUM RESORCINI COMPOSITUM.

*Compound Resorcin Ointment (Soothing Ointment).*  
(N.F. 1906 amended.)

Resorcin	...	...	...	6 parts
Zinc oxide	...	...	...	6 parts
Bismuth subnitrate	...	...	...	6 parts
Oil of cade	...	...	...	12 parts
Yellow beeswax	...	...	...	10 parts
Soft paraffin (white)	...	...	...	25 parts
Anhydrous wool-fat	...	...	...	25 parts
Glycerin	...	...	...	10 parts

Dissolve the resorcin in the glycerin and incorporate the zinc oxide, bismuth subnitrate, and oil of cade. Melt the yellow beeswax, soft paraffin, and anhydrous wool-fat, add to the other mixture, and stir until it congeals.

NOTE.—Darkens on exposure to air and light, and should be kept in air-tight containers.

## UNGENTUM ZINCI CARBONATIS COMPOSITUM.

*Compound Ointment of Zinc Carbonate.*

Zinc carbonate	...	800 grains	45 Gm.
Salicylic acid	...	100 grains	5.6 Gm.
Hydrous wool-fat	...	800 grains	45 Gm.
Soft paraffin (white)	...	5 ounces	125 Gm.
Benzoated lard sufficient to make	...	10 ounces	250 Gm.

Melt the soft paraffin with gentle heat, remove from heat and dust it into the zinc carbonate and salicylic acid, previously well powdered. When thoroughly mixed, gradually add the hydrous wool-fat and benzoated lard and stir until cool.

## VINUM OLEI MORRHUOLIS.

*Wine of Morrhuel.*

Morrhuel (gaduol)	...	80 grains	4.6 Gm.
Fluid extract of liquorice	...	3 fluidounces	75 c.c.
Glycerin	...	2 fluidounces	50 c.c.
Syrup of wild cherry	...	4 fluidounces	100 c.c.
Liquid extract of malt...	...	8 fluidounces	200 c.c.
Compound syrup of hypophosphites	...	4 fluidounces	100 c.c.
Fuller's earth, in powder	...	240 grains	15 Gm.
Sherry wine sufficient to make	...	40 fluidounces	(1000 c.c.).

Mix the morrhuel with the glycerin and triturate with the Fuller's earth; add the fluid extracts and syrup of wild cherry, allow it to stand for twenty-four hours, agitating occasionally, then filter and add the syrup of hypophosphites; lastly add sufficient sherry wine to make 40 fluidounces (1000 c.c.).

CERATUM GALENI (Cold Cream) is now called Ceratum Paraffini, no doubt because the compilers recognise that Galen's cerate did not contain liquid paraffin. A note to the elixirs of glycerophosphates is:

Inasmuch as some glycerophosphates of commerce have varied strengths, the quantity given above will have to be regulated according to the strength of the glycerophosphate used.

ELIXIR PEPSIN Co.—The quantity of glycerin in 40 oz. has been changed from 10 to 5 oz., and of water from 5 to 10 oz.

EXT. CASCARÆ SAGRADÆ AROM. FLD.—The quantity of cascara sagrada in 100 oz. has been increased from 60 oz. to 80 oz.

OL. RICINI AROMAT.—Sodium bicarbonate has been omitted, as the glucide is quite soluble in chloroform and the oils.

TWO NEW OILS are now being manufactured in Queensland. One is distilled from the leaves and terminal branches of a ti-tree, 100 lb. of leaves yielding 2½ lb. of oil which resembles eucalyptus oil. The other is obtained from a shrubby ti-tree, the leaves and terminals yielding 1 per cent. of an oil heavier than water, and containing constituents allied to oil of cloves and cinnamic acid, and said to be methyleugenol.

CATCHING LIONS WITH FLY-PAPERS is, according to the "Evening Standard," the latest form of sport. The head shikari of the Maharajah of Gwalior, India, managed at night to barricade four lions in some huts, but had to keep them there for a fortnight before he thought out a plan for their capture. Ultimately he hit upon the idea of covering a considerable space in front of the huts with thousands of fly-papers. When the barricades were removed the lions immediately jumped out of the huts, only to have their paws covered with the sticky papers. In trying to release their paws by scraping them on their faces the animals ultimately covered their eyes and noses with the papers, and in this further predicament lay down and rolled helplessly about the ground. The shikari then rushed forward, lassoing the beasts, and bound them with ropes.

## MEDICAL GLEANINGS.

## Cancer in 1488.

A CORRESPONDENT of the "Lancet" (1911, I., 111-113) states that among the MSS. of the town of Southampton printed by the Historical MSS. Commission (11th Report, Part III., p. 17), is the following:—"2 Richard III. A medecyne for a canker. Take the juice of the rote of a bethwynde otherwyse called wehwynde and amoynt the canker therewith ix. or x. days till he be hole (sic)."

## Removal of Superfluous Hair.

DR. A. HOWARD PIRIE states ("British Medical Journal," 1911, I., 972) that the x rays remove superfluous hair well. One girl he treated had a beard like a man. In her case one dose was given to make all the hair fall out. After a month, when the hair had fallen out, and all reaction had subsided (for it is usually necessary to get a little reaction for epilation on the face) another epilation dose was given on the now hairless skin of the face, and this was repeated each month for six treatments. The part was then left untreated. It is seven months since the last treatment, and the hair has not begun to grow.

## Turpentine Locally in Gonorrhœa.

DR. J. C. McWALTER, writing to "The Lancet" in regard to Mr. Andrew Charles's urethral ointment applicator, states that the local application of turpentine to the urethra by means of that instrument, or even by an ordinary catheter, has given very satisfactory results in cases of urethritis of a chronic kind, urethral chancroid, and specific urethritis. Many think that the beneficial effects of copaiba are due to its antiseptic action when excreted, since the direct action of pure turpentine locally may well be more potent. It is the only antiseptic which is practically painless applied to this region.

## Antiseptic Inhalations in Consumption.

DR. W. J. HODGSON mentions in the "British Medical Journal" (1911, I., 938) a patient whom he has had under antiseptic inhalation treatment since December 1909. She suffers from pulmonary consumption, and at that time she was so extremely emaciated that her friends considered that her death would be a "happy release." In December 1909 he read Dr. David Lees' paper on antiseptic inhalations, and at once put her upon it. The effect, he says, has been remarkable. She did not require a dose of medicine in 1910. Cough was relieved, sputum diminished, there has been no attack of hæmoptysis. General condition so much improved that she can bear to be taken out considerable distances in a chair without fatigue. She has taken sufficient antiseptic solution during these fifteen months to have either poisoned or bled her to death, that is, if the treatment properly used can have such deleterious effects. Dr. Hodgson has treated also several cases in the slums of the town, and they have invariably been much relieved.

## Rectal Feeding.

DR. W. LANGDON BROWN read a paper at a recent meeting of the therapeutical and pharmacological section of the Royal Society of Medicine entitled "An Inquiry into the Value of Rectal Feeding." He reviewed the evidence which has been adduced in support of the absorption of foodstuffs from the large intestine when nutrient enemata are given, pointing out that in regard to proteins and fats it chiefly depends upon the failure to recover the whole of the administered nourishment by washing out the bowel. This is a fallacious method, since it is notoriously difficult to empty the bowel completely in this way, and the fact that the food could not be recovered did not prove that it had been assimilated, since it might have undergone putrefactive changes which would render it useless. The chief structure for the absorption of food is the highly specialised epithelium of the villi, and unless regurgitation through the ileo-caecal valve occurs—an improbable event—the amount assimilated from rectal feeding must be very slight. After giving evidence that fats are not absorbed from nutritive enemata, Dr. Langdon Brown said that dextrose can be absorbed per rectum, this being proved by the way it raises the respiratory quotient and abolishes or

diminishes acidosis. Salts and water could certainly be absorbed in this way, and these are probably the constituents to which nutrient enemata owe their reputation. The conclusion arrived at is that if any protein were absorbed by the large bowel the amount is so small that it is not worth while to submit the patient to so unpleasant a procedure. When the efficacy of nutrient enemata is so seriously open to question their drawbacks assume greater importance. These were considered in turn, and the speaker expressed the opinion from his experience that between the Lenhartz method of immediate feeding by the mouth and the use of rectal salines with 5 per cent. of dextrose there is no place in therapeutics for the nutrient enema containing protein and fat.

### Sheep Rot in Man.

MR. GORDON R. WARD, M.R.C.S., L.R.C.P., resident medical officer of the General Hospital, Tunbridge Wells, communicates to the "British Medical Journal" (1911, I., 931) an interesting and exhaustive paper upon the existence of hepatic distomiasis or sheep rot in man. He states that Trentler, in 1793, recorded a case of this kind, and since then twenty-three other cases have been described. The communication cites a case in the hospital last year under the care of Dr. L. Adeney. In the course of the article Mr. Ward gives the following description of the life cycle of the parasite:

"The *Fasciola hepatica* is found in the gall-bladder and bile-ducts of sheep. More rarely it is parasitic in cattle, but in them the disease does not run so acute or fatal a course. The eggs of the adult fluke are conveyed by the bile into the intestine, and so eventually reach the water or damp grass which is essential to their further development. After a time, varying from three or four weeks to as many months, according to the time of year, a ciliated embryo emerges from each egg by pushing off the lid. These embryos are known as miracidia, and soon enter a small snail—*Limnaeus minutus*—there to form sporocysts. Although sporocysts may be formed in closely allied species, no further development takes place. In the *Limnaeus minutus* each sporocyst produces a large number of rediæ, and from these again are formed cercariæ, which leave the snail and lead an independent existence. When living in water they appear to the naked eye as small whitish bodies. They may then encyst themselves on the stems of grasses, and in that condition are capable of surviving extremes of heat or cold, and even desiccation. The cercaria is that stage in the life-cycle at which the fluke becomes parasitic in mammals, and may be ingested while actually in the snail, in drinking water, or on vegetable foodstuffs. It is probable that drinking-water chosen at the dictates rather of necessity than desire, and watercress, sorrel, etc., are responsible for the transmission of the parasite to man."

Following upon this are given very full particulars of the ailment, including diagnosis, prognosis, and treatment, reference to the original in regard to these being desirable, as the main object of the present note is to notify a very rare occurrence.

## OPTICAL OBSERVATIONS.

By a Chemist-Optician.

### Eye-strain.

In a paper in "The Lancet" by Dr. James Hinshelwood, Glasgow, dealing with eye-strain in relation to the general health, it is stated that it is important to bear in mind that eye-strain may be present without the patient experiencing any discomfort or pain in the eyes; that eye-strain may be present although the patient possesses good and even normal vision as tested by the types; and that glasses will not give relief unless the refractive error has been adequately and exactly corrected. Bearing in mind these facts, it is evident that the only safe rule of practice is that every patient suffering from headache of a recurring or chronic character should have his refraction carefully examined by someone thoroughly competent to make such an examination. The complex origin of headaches is dealt with in the paper and the completeness of the relief that follows directly eye-strain is removed.

### Conical Cornea.

MR. SYDNEY STEPHENSON, in a letter to "The Lancet," mentions that the chief and only real conflict of medical

opinion at the second trial of *Markhams v. Abrahams* was in regard to the question of whether an increase in conicity estimated at 4 D. could or could not occur in about seven months. Mr. Stephenson also writes regarding the frequency of conical cornea, which at the trial he estimated as 1 in 10,000 patients, this being founded on a discussion which took place at the French Ophthalmological Society in May 1899. The figures are as follows:

Holth	reports	0 cases	in	35,000 eye-patients.
Péchin	"	0	"	10,000
Könnde	"scarcely	1 case"	"	10,000
Axenfeld	reports	1 case	"	25,000
Antonelli	"	3 cases	"	30,000
Parissotti	"	10	"	40,000
Vacher	"	20	"	40,000
Wicherkiewicz	about	30	in	120,000 to 150,000

The figures given above work out at 1 case of conical cornea in 13,000 eye-patients. The estimate, therefore, of 1 in 10,000 patients was well within the mark.

### Artificial Eye-fitting

is often neglected, chiefly because many chemist-opticians do not think "the game is worth the candle." This is a mistake, for artificial eyes have to be renewed as a rule every twelve months or so, even if they are not broken, and each eye properly fitted should mean many repeat orders. A large outlay is not necessary, and the art of fitting is quickly acquired. The great thing necessary to a beginner is confidence, and if it can be realised how easy it is to insert and take out an artificial eye, this should come quickly. It is a good plan to keep a register of eyes supplied and remind each customer twelve months or so after fitting that when roughness of the eye or any discomfort is felt it is advisable that a new one should be purchased. When peculiarly shaped eyes are fitted, in fact with every eye supplied, it is a good plan to make a model in plaster of Paris for reference on future occasions as to shape. This is done by half inserting the eye, previously well oiled, into freshly mixed plaster of Paris, and when the plaster is set the mould with the eye still in place should be oiled and a fresh portion of plaster poured in. The two halves can afterwards be taken apart, the eye taken out, and the cavity (which must be again oiled) filled up with more plaster of Paris. A good model of the artificial eye results.

### Conjunctivitis.

In a paper contributed to the Newcastle-on-Tyne Division of the British Medical Association, Mr. H. Percy Bennett, M.B., C.M. Edin., states that the mistake usually made in treating conjunctivitis is in using strong astringents or strong antiseptics at the commencement; the condition is thus usually aggravated. Boracic acid lotion, to wash out the conjunctival sac thoroughly, or even only sterilised water with some sodium chloride in it, will in many cases bring about the cure. In other cases astringents may later on be necessary, and as there are many of these to choose from, it is better to avoid the lead lotions, because, if there be an ulcer on the cornea, a white and disfiguring incrustation of lead forms at the site of the ulcer. This can only be removed afterwards with great difficulty. He has seen this occur on more than one occasion after a patient has had a lead and opium compress on the eye for a short time to relieve pain. These ulcers proved most obstinate to get to heal, required scraping several times, and were very painful. Attention to the patient's health and surroundings and getting him into the open air are extremely important, and may effect a cure without any applications to the eyes. Unless advised not to do so, patients think they should stay indoors when they have what they call "cold in the eyes," and that they should even keep in a darkened room. There is no advantage in keeping a patient suffering from conjunctivitis in a darkened room. In regard to the difference between the injection of an eye in iritis and conjunctivitis, Mr. Bennett mentions that in iritis the injection is immediately around the cornea and is of a pinkish hue, whereas in conjunctivitis the hyperæmia is more marked towards the periphery of the bulbar conjunctiva. But it is not very uncommon to come across cases of conjunctivitis where there is, from the appearance of the eye, some doubt as to iritis being also present.

## A Pharmacist's Holiday.

Mr. G. Claridge Druce, M.A., Ph.C., F.L.S., who has just returned from a trip abroad, gives in this communication the first account of his botanical discoveries in Funchal.

WE had wintered in Medeira, that island of equable temperature and rich vegetation, where the hills rise about Funchal in terraces, each with its small richly irrigated fields of sugar-cane, till these gave way to vines, and higher up to legumes and lupine. Above 2,000 ft. are the remains of the aboriginal flora, but this area remained obstinately cloud-capped during our stay in the island. The water-supply of the town is partly drawn from springs issuing from the rock below the Governor's Palace or brought down in open pipes from the hills above, but is, as we saw, in dangerous closeness to contamination, and perhaps accounts for the serious outbreak of enteric fever last year, while it must, if not altered, help to spread the cholera now raging there. But when we saw it in 1909 the scene was fair enough in all conscience—the pergolas with their dazzling display of the rich orange coloured *Bignonia venusta*, or the scarlet and blue Passion flowers and blue *Ipomaea*, or the terraces with their walls a blaze



STREET PAVIOS AND COBBLES IN FUNCHAL.

of *Bougainvillea* in terra-cotta, mauve, and purple, which almost tired the eye with their bombardment of colour. Sometimes outlined against the blue azure main might be seen the orange-red spikes of *Tritoma*, of which my friend Miss Acland had produced the most beautifully effective colour-photograph I have yet seen, but which, alas, was accidentally broken. Then there were the river-beds in which the washing of clothes is carried on, but which Nature in its rampant and most benign mood covers as best it can with the alien Asian *Colocasia*, with the South African *Pelargonium*, and Mexican *Datura suaveolens*, the tropical *Commelina*, the castor-oil plant (*Ricinus communis*), the white African arum (*Richardia athiopica*), or the Mexican *Senecio mikanioides*.

But the curse of Funchal is the roads. Scarcely a mile on the level, and almost always on a gradient, they are paved, like that to the lower regions, with good intentions, and are of use only to the ox-sledges, the national vehicle, which go along, or rather are drawn by two slow oxen, preceded by a boy armed with a long whip of soft hair, which he uses, not to punish his cattle, but to drive off the flies which go to sleep upon his team, while in a not unmelodious chant he sings, "Oh, come to me, my oxen," which they do with measured beat and slow—the very funeral of time. The boy also carries an oily rag, or a bundle of oily beans, which he from time to time puts under the runners of the sleighs, not exactly to oil the feet of time, but to prevent a discord of sounds and wear of metal upon the stony sets. Seated inside, the motion is smooth enough, and at two miles an hour you hasten slowly, but

you don't exactly turn a corner, since there is no differential gear to this motor car, which swings suddenly round to the discomfort of your diaphragm and cerebrum, making you feel eviscerated and giddy. Then your view is sadly circumscribed; but even if you get out to walk no vast horizon greets you; wherever you go you are within high walls, and narrow is the strip which Funchalites call sky. But to walk is dreadful, the oily sets are slippery as ice, and the gradients are stiff; to go up is only less awful than to come down—I lived in daily fear of imitating the example of the Gadarene swine—and there was the sea below.

By starting immediately after breakfast one might, with energy and good luck, get out to the precincts of the town. One never could get free of houses and gardens, so thickly populated is the area. I am writing as a botanist, and by that I mean it was extremely difficult to get on to any aboriginal vegetation. The great volcanic headland of the Brazenhead (Cabo Garajao), which was barren enough to have been let alone, was covered with a profuse growth of the prickly pear, an invention of the Evil One to spite botanists, and it was only here and there on the cliffs might be seen the pride of Madeira, a shrubby perennial *Echium*, with its pale aerial blue flowers, or the local *Cervicina lobeliodies*, L., so different from its Cornish cousin, our little ivy-leaved bellflower. It was interesting to see on the hill the British *Geranium rotundifolium*, since on one of the precipitous sides it was all white-flowered, and showing, I think, that the colour-form came true from seed. Here, too, occur a few dragon's-blood trees, *Dracyna Draco*. Then after a too short time in the open and although on ground that was steep but not glassy, one had, if one wanted to get home to dinner, to start back on the treacherous descent, with a poor consolation in knowing that it is only the wicked who stand in slippery places. Personally I qualified for a high position in hagiological circles. It was usually a battered and bruised individual who painfully sat down to dinner in our comfortable hotel, where custard apples, deliciously ripe, were a welcome and daily adjunct to our repast. My window opened on to a verandah above the garden in which a magnificent so-called camphor-tree gave shade, heliotrope, 20 ft. high, gave fragrance, while bright ruby-coloured flowers of the prickly *Euphorbia coccinea* or *pulcherrima* or the still more blazing *Poinsettia*, the yellow and violet *Streptocarpus*, or masses of pale yellowish or white roses enlivened the scene. Pale yellow or reddish bells of gigantic *Datura* gave an Oriental touch, while the *Bougainvillea* reminded one of Ceylon, not to speak of *Abutilon*, *Allamanda*, *Hibiscus*, *Wistaria*, and *Stephanotis*; in fact, almost everything except bulbs does well in a Madeiran garden. In this paradise one forgot the slippery streets, and perhaps a too lazy love for the *dolce far niente* was developed.

A fearsome ascent led from Funchal by the sugar-cane fields (the arms of the town are five sugar-loaves) up to Monte, and this was a revelation as to the way in which, with all its protective tariffs, Madeira has become the unconscious dumping ground of the world's vegetation. In the arable fields, the British (or perhaps, to be more correct, the plants which grow in Britain) *Antirrhinum Orontium*, but paler in flower than our form, and *Stachys arvensis* are common; but with them may be seen the South European *Stachys annua*, *Lathyrus*, and *Ficia*, with the South American *Budens pilosa*, with its pretty white ligulate flowers, and its most insinuatingly prickly fruits, which insert themselves into one's clothing and thus get distributed by man or beast in Madeira as they have in Ceylon. The prickly pear and the "scarlet geranium" are in every waste place, the feathery fruits of the latter being carried far and wide by gentle breezes or fierce gales alike, while festoons of the ivy-leaved geranium hang over walls or cliffs. Little grass is to be seen—coarse and harsh *Panicums*, *Pennisetum*, *Andropogon hirtus*, or *Piptatherium multiflorum* give little forage even for the hungry goats. Here and there is the naturalised Mexican plant which never dies—*Bryophyllum calycinum*—with its curious pendulous flowers, growing side by side with a Cape *Mesembryanthemum*, the pretty purple *Oxalis*, and the curious native *Aristolochia longa*. The fields here were full of

batatas or sweet potato, while huge gourds in great variety twined like some gigantic serpent over trellis and fence.

A walk along the cliffs to the north of Funchal, after the initial difficulties of the climb to the Palace Hotel, was along a made road, but the ground is almost all under cultivation. However, on the cliff edge could be seen the beautiful Madeiran stock *Matthiola madeirensis*, and here, too, we gather *Gomphocarpus fruticosus*, reminding us of Sicily and Corsica. A hillside was a fine sight with the Madeiran *Echium*, already alluded to, on which a gigantic spider had made a correspondingly large web. In the cultivated fields were *Gladiolus*, the umbelliferous *Ammi*, and curious *Crepis* and other Composites. But to write of Madeira without mentioning the quintas or gardens would be to leave out the meat from the sandwich. What a wonder they are! The town garden in the Praça da Constituição, with its splendid palms, its quaint *Monstera deliciosa*, and its undergrowth of *Freesia*, was interesting, but the richness of such a one as Dr. Watney's is quite remarkable. The slightly varying temperature allows plants of almost every zone to flourish. Perhaps even more interesting was the Deanery garden, where are splendid palms, which were a favourite group of the owner (Mr. Powell), and he had them from nearly every palm-growing clime, having raised many from seed. The eucalypts were also very striking. Quite a large tree was shown us, only planted on the Queen's Jubilee. Here the beautiful coral-tree, *Erythrina caffra*, flourished, and Blue-eyed Susan (or *Thunbergia*) hung in graceful festoons, *Cestrum* and *Fuchsia pendulina* delighted the eye, while the great cotton-tree of Jamaica, *Bombax Ceiba*, afforded grateful shade. *Araucaria excelsa* gave dignity, and the quaint screw pines

the 'fifties the *Oidium Tuckeri* began its attack on the vine, and in 1873 the devastating *Phylloxera* commenced its ravages, and it was not till American vines began to be introduced that anything like successful culture could be maintained. We visited some of the cellars where wines of great age are stored, and these may be judiciously sipped, having the fear of gout before one, with not ungrateful feelings. Excellent basket-work is made by the inhabitants, and it is interesting to see them twist the apparently intractable material with as much ease as if it were indiarubber. The willows for it are grown up in the ravines above Monte, etc. Cabinet work from the native *Persea* is also made. A beautiful walk with glorious views may be had from the vicinity of Santo Antonio Church, where the naturalised white lily, *Lilium candidum*, and the lovely star of Bethlehem, *Ornithogalum arabicum* (which we last saw grow on house roofs in Catania), grow plentifully. Up here, too, we gathered the curious kidney-shaped leaves of the fern *Adiantum reniforme* and the Madeiran violets in great quantity.

In the vicinity of Funchal we gathered a plant new to the island, *Sisymbrium austriacum*, doubtless introduced, and we also obtained the curious *Sempervivum glutinosum*, smelling, as Lowe says, like ripe nectarines, as well as the gigantic *S. arboreum*. In the stones of the detestable roads may be seen *Oxalis* and *Spergularia*, and oftentimes a small *Cyperus*.

## A Rare Book.

*Approaching Sale of an interesting and rare medical work.*



MARKET SQUARE, FUNCHAL.

*Pandanus*, including *P. utilis* (which was flowering freely), added variety to this gardeners' paradise. Nor was the serpent lacking, for the prickly *Encephalartos villosus* and *ficifolius* were in evidence, while the curious *Cibotium*, the *Cycas circinata*, the Indian *Brownia erecta* (*Theophrasta pinnata*), the fragrant Ceylon cinnamon (*Cinnamomum zeylanicum*), and the fern-like leaved *Salisburia*, not to speak of the multitude of ferns of all sizes, combined to make a scene of entrancing interest.

There are several good pharmacies in Funchal, and fairly high prices are obtained, and notwithstanding the heavy duties, English goods were in evidence. The sugar-cane industry has already been alluded to: it dates from the earliest days of Madeiran occupation, in the early part of the fifteenth century, when it was introduced from Sicily. But its existence now is bolstered up by protective duties, Portugal admitting free the Madeiran produce, while English sugar sent to Madeira has to pay nearly 10*d.* a pound, and the manufacture is practically monopolised by two or three firms. In the eighteenth century the wine culture seriously competed with cane-growing, and in 1821 as much as 400,000 gallons of Madeira was shipped to England. Then in

SIR THEODORE MAYERNE'S "Book of Cases" is about to be offered for sale as part of Sir Thomas Phillips's collection of MSS., and will doubtless fetch a good price. Mayerne, who was physician both to James I. and Charles I., is one of the most interesting figures in our medical history. There is a notice of him (with a fine portrait) in Wootton's "Chronicles." He played a leading part in the preparation of the first Pharmacopœia Londinensis, and in the British Museum there is a copy of the third reprint of that work with copious notes in his hand. The Sloane MSS. include quite a number of his works, in one of which, a book of prescriptions, largely for members of the royal household, occurs a most interesting note of his journey to Exeter to attend the Queen in her approaching confinement in 1644. The note, which is in Latin, relates that he was summoned both by the King and the Queen, the former being then at Oxford, and left London May 21, accompanied by his colleague Sir Matthew Lister. They travelled all the way in the Queen's own carriage, under the guidance of one of her servants, and reached Exeter on the 28th of the month. He adds a copy of the Queen's letter, which is in French. Translated, it runs:

"Exeter, May 3rd. Monsieur de Mayerne,—My indisposition does not permit me to write much in order to ask you to come, if your health permits, but my illness invites you more, I hope, than many lines would do. That is why I will only say this: having always in my memory the care you have had of me in my needs makes me believe that if you can you will come, and that I am and always [shall be] your very good mistress and friend, Henriette Marie R."

The King's letter, which follows this, was sent under cover to Mayerne's father-in-law, Albert Joachim, in London. It was brief and urgent:—

"Mayerne, for the love of me, go to my wife."

The royal pair had then been married nineteen years; six weeks before the date of the Queen's letter they had been compelled to part (never to meet again); on June 16 her baby, Henrietta, afterwards Duchess of Orleans, was born; a fortnight later she fled to France to escape capture by Essex.

## SCIENTIFIC PROGRESS.

Temperatures under this heading are on the Centigrade scale.

**Peristaltin.**—This body is a glucoside, of the formula  $C_{12}H_{22}O_{11}$ , extracted from *Cascara sagrada*. It is a yellow powder, soluble in water and in dilute alcohol. It has a marked purgative action.

**A New Anæsthetic.**—Under the name cycloform, Trauss has introduced the isobutyl ester of *p*-amidobenzoic acid, which forms a white crystalline powder, slightly soluble in water, easily soluble in alcohol, ether, and benzene. It is a powerful local anæsthetic, and has but little toxic action. It is recommended in the form of a 5-per-cent. ointment dressing, and is useful in certain skin-diseases.

**Quinine Radiation.**—Broglie and Bizard ("Comptes rendus," 142) have carefully examined the radiation phenomena of sulphate of quinine. This alkaloidal salt is frequently observed to discharge a charged electroscope when held near it, whenever it is warmed or cooled. At the same time the salt becomes phosphorescent. These phenomena have now been traced, not to radio-activity, but to small electrical discharges brought about by friction during the rapid breaking of minute crystals due to change of temperature.

**The Hydration of Metaphosphoric Acid.**—J. E. Myers and Dr. A. Holt, in a communication to the Manchester Philosophical and Literary Society, state that they find that hypophosphoric acid is formed as an intermediate compound in the hydration of metaphosphoric acid, the hydration not taking place according to any simple scheme. From the depression of the freezing-point of aqueous solutions of various varieties of pyro and meta acids, it appears that, when these acids are prepared by dehydration of orthophosphoric acid, there occurs association of the molecules, and when prepared by decomposition of the lead salts by drogen sulphide, simple molecules result.

**Cupritartrates and Analogous Compounds.**—S. Ulickering ("Proc. Chem. Soc.," No. 380, p. 7) obtains by adding potassium hydroxide to copper tartrate just short of alkalinity, and precipitating with alcohol, a cupritartrate of the formula  $(C_4H_4O_6.CuO).(CO_2).K.Cu.H_2O$ . By the further addition of the alkali and water, two others are derived from it by the partial substitution of copper for the potassium. Analogous compounds of saccharic and mucic acids were obtained. Probably the hydrogen in the alcoholic hydroxyl is replaced by the group  $(Cu^{II}H)^I$ , the copper in the carboxylic portion of the molecule being present as  $(Cu^{IV})^{II}$  in the cupritartrates. Quinic acid forms analogous compounds, but these have not been obtained pure.

**The Active Principle of Ergot.**—An able review of the chemical work done on the active principle of ergot by C. Crawford appears in "The American Journal of Pharmacy" for April. The following is the *résumé* of the article: Investigators have long recognised in ergot the presence of bodies which have been designated as alkaloids. The specific alkaloid, ergotoxin, is present in such small quantities in ergot that we cannot trace the entire therapeutic action of ergot to this compound alone. It would be well to decide whether the action of ergotoxin is not really due to an amino group. The evidence at present points to the fact that ergot owes its activity to the presence of various basic amino compounds, and this is supported by the fact that only fresh ergot is official in certain pharmacopœias, as it is known that ergot rapidly degenerates with the formation of tri-methylamine. It is interesting to note that practically every preparation introduced by chemists or pharmacologists has been endorsed by some clinicians as useful in labour. This may perhaps be explained on the basis that all such preparations have carried mechanically with them some of the active constituents of ergot, but the conditions under which labour pains intermit and recur are so little understood that it is rather difficult to show always the relation of ergot to such pains.

**The Determination of Hypophosphorous Acid.**—Osenheim and Pinsky ("Zeit. f. Anorg. Ch.," 54, 327), in a paper on the determination of the various acids of phosphorus in presence of each other, attack the difficult problem of examining commercial samples of hypophosphites. The scheme of analysis is as follows: To determine hypophosphorous acid, the solution of the salt of about decinormal strength is acidulated with sulphuric acid, and decinormal potassium-permanganate solution is added, a few c.c. at a time, the mixture being heated to 80°-90°. Excess of permanganate is determined by titration with oxalic acid. If hypophosphorous acid alone is present, the permanganate-value will represent both acids, and the hypophosphorous acid is determined by titration with iodine. Where only hypophosphorous and phosphoric acid

are present, either permanganate or iodine titration gives good results for the former, and an estimation of phosphates as magnesium pyrophosphate after oxidation with nitric acid gives the total acids present. Where phosphoric, phosphorous, and hypophosphorous acids are all present, the following scheme will suffice: (1) Oxidise with nitric acid, and precipitate the resulting phosphoric acid as magnesium pyrophosphate. (2) Oxidise with potassium permanganate, which reacts with all except phosphoric acid. (3) Titrate with iodine, which is only used up by phosphorous and hypophosphorous acids. (4) Titrate with uranium nitrate, which reacts with one molecule of phosphoric acid. These results will give four equations containing four unknown quantities, which are easy to resolve.

**Constituents of the Root of *Lasiophon Meisnerianus*.**—Harold Rogerson, of the Wellcome Research Chemical Laboratories, communicates a paper to the "American Journal of Pharmacy" on the results of his chemical examination of the root of *Lasiophon Meisnerianus*, Endl., described by G. E. Oliver in THE CHEMIST AND DRUGGIST (1908, I, p. 645). Mr. Oliver supplied the roots, which were specially collected. Successive extractions with solvents yield the following percentage results: Petroleum (b.p. 35°-40°) 0.8, ether 1.8, chloroform 0.4, ethyl acetate 2.4, and alcohol 8.4, the total extractive being 13.8 per cent. No volatile products were obtained on submitting the alcoholic extract to steam-distillation. The water-soluble portion of the alcoholic extract yielded tannic matter and a sugar forming *d*-phenylglucosazone, melting at 204°-205°. The resin (12.3 per cent.) was a brown powdery substance with an irritating effect on the nostrils on inhalation and a burning taste similar to that produced on chewing the bark of the root. From the petroleum extract a phytosterol in flat needles, melting at 132°-133°, was isolated, while from the fatty acids obtained on saponification palmitic acid was isolated; the liquid acids consist chiefly of oleic acid with a very small amount of an acid of a higher degree of unsaturation. The ether, chloroform, ethyl acetate, and alcohol extracts yielded nothing definite. The author concludes: "Notwithstanding the very complete examination to which the roots of *Lasiophon Meisnerianus*, Endl., have been subjected, it will be seen that they have yielded but little of chemical interest. The chief constituent of the root is an amorphous resin, to which, as had previously been observed, its acrid properties are evidently due."

**Toxicological Tests for Colchicine.**—Dr. Hermann Führer ("Archiv für Experimentelle Path. u. Pharm.") considers it necessary to apply biological as well as chemical tests for colchicine, since although colchicine resists the putrefactive processes of the dead body for several months, certain animal decomposition-products give colour-reactions similar to the alkaloid. The violet and green colours gradually fading into yellow given by colchicine on treatment with concentrated nitric acid are its most important colour-reactions. The addition of caustic potash in excess causes the yellow solution to change to cherry or orange red. Dr. Führer, by evaporating the colchicine solution to dryness, dissolving the residue in 3 drops of concentrated sulphuric acid, and drawing a glass rod which has been dipped in nitric acid through the yellow solution thus produced, finds that he gets the characteristic violet colour with quantities down to one-fiftieth of a milligram of colchicine. The colour soon fades when only small quantities of colchicine are present, but when caustic soda or potash is added a cherry-red colour appears at the junction of the two liquids. Dr. Führer states that in Ziesel's ferric-chloride test the following modification is sensitive if between 2 to 5 milligrams of alkaloid is present: 3-5 c.c. of colchicine solution is heated with 5 drops of dilute sulphuric acid in a water-bath for half an hour, and then ferric-chloride solution added drop by drop as long as the green colour grows darker. The cooled fluid is shaken with a third of its volume of chloroform, when the chloroform-layer is coloured from yellow to garnet-red, according to the amount of colchicine present. For small quantities recoverable from bodies Dr. Führer suggests white mice as suitable animals for the biological test, the fatal dose for animals between 15 and 20 grams being one-fiftieth to half a milligram. The symptoms of colchicine-poisoning consist of sickness and diarrhœa, with death resulting from respiratory failure.

**ORANGE-OIL DUTY IN U.S.A.**—The "New York Commercial" of April 19 reports that the orange-oil case was practically closed on Monday (April 17), the Government having "rested" after having delayed the matter for more than six months, without putting in a single shred of evidence of any description. The Board has granted attorneys for both sides thirty days to file briefs, and thereafter the outrageous delay to which the trade has been put in this matter by the Government attorneys is likely to be brought to an early termination by the Board's decision.



### Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

#### Usquebagh.

SIR,—My reading of your interesting editorial on Usquebagh happened to synchronise with an inspection of a copy of "Pharmacopœia Londinensis," by Nicholas Culpeper, dated 1653, obtained from the Pharmaceutical Society's library. I find on page 69 that the "Colledg" formula for Usquebagh is the same as the one you quote, so that Wootton is surely wrong in describing the formula of P. L. 1677 as the most striking *new* formula contained in that edition.

Yours sincerely,

GEORGE VOGT.

Kendal.

[The formula for Usquebagh was re-inserted in the P. L. 1677, it having been omitted from the previous edition. Culpeper classes it among the preparations that were omitted from the P. L. 1651, which would be current at the time his book was published.—ED.]

#### The Comprehensive Pharmacists' Register.

SIR,—I decline to impale myself on either horn of the dilemma suggested by Xrayer II. I suggest it is as simple as to commit sin for the Government to introduce a Bill making the practice of pharmacy in the British Empire illegal except for those whose names appear in the Imperial Pharmacists' Register. As to medical men, their existing rights must be observed, but as they are neither put on nor kept off, the Act will not apply to them; just as they are not on the Dentists' Register, but can practise dentistry. Therefore I, *quâ* medical practitioner, should not go on the Imperial Pharmacists' Register, but I, *quâ* Irish pharmacist, would.

Yours truly,

Dublin.

J. C. MCWALTER.

#### St. Cuthbert's Co operative Association, Ltd.

SIR,—I observe in THE CHEMIST AND DRUGGIST, April 22, index folio 564, you state that the turnover of the five retail drug shops of St. Cuthbert's for the half-year was 3,650*l*. This, however, only represents the cash sales. The total sales were 6,451*l*. Your reporter has evidently omitted to take into consideration the credit sales, which (as explained on a previous occasion) have to be added to the cash sales to show the total trade of the department. The profits stated should be shown as gross profits. The net profits for the five branches were 1,444*l*. 13*s*. 7½*d*.

Yours truly,

Edinburgh.

A. WALLACE.

#### Indian Perfumes.

SIR,—In THE CHEMIST AND DRUGGIST for April 15 "Manager" asks for some information on the botanical origin and English equivalents of the following Indian scents: Hina, Thas, Toohi, Chambeh, and Loban. The first is, undoubtedly, the Henna, as we are mostly in the habit of spelling it (*Lawsonia alba*). *Hinâ* with the accent over the final letter is the Persian way of spelling it. The plant is well known and widely cultivated throughout India, Persia, Egypt, and other parts of the East on account of its perfume, the use of the leaves as a cosmetic being well known and of very ancient origin. The most important and interesting use of the leaves, however, is as a dye producing shades of yellow or yellowish brown. *Thas* in your correspondent's letter is evidently a misprint for Thus, the Arabic name for frankincense, or Olibanum of European commerce, the resin, probably of several species of *Boswellia* but chiefly of *B. Carterii*. The

Arabic name of Luban is also given to this resin, and approaches very near in the spelling of your correspondent's Loban, with which it may be identical, or it may refer to Benzoin, the resin of *Styrax Benzoin*, which in Arabic is spelt Loban. *Chambeh*, as you state, is a corruption of Champa, which, with slight variation, including Chamba, is common throughout India. The yellow flowers are not only used for their perfume, which is very powerful and is, I believe, the original source of the perfume known as ylang ylang, but they also yield a yellow dye. The tree (*Michelia Champaca*) is a large evergreen. The *Toohi* of "Manager's" inquiries is not so easily answered. There are many forms of spelling in Indian names producing similar, or almost similar, sounds, such as *Too* or *Luh*. Thus the plant inquired about may be *Delphinium vestitum*, which is known in Simla as the *Luhé*, but nothing has been stated as to the fragrant character of any part of the plant.

Yours truly,

JOHN R. JACKSON.

#### An Epidemic among Dogs.

SIR,—I have been a breeder and fancier for twenty years and have tasted "the bitter-sweet" of distemper in various forms. The present distemper, or canine influenza, is generally known among fanciers as German distemper. It has to be fought in various forms.

ULCERATED MOUTH AND THROAT.—The following mixture is good:

Acid. carbolic. (Calvert's No. 2) ʒiij.  
Aq. menth. pip. ad ... ʒviij.

M.

Dose.—Poms, etc., four months to seven months, give 10 to 15 drops; terriers, fox, etc., give 40 to 60 drops; collies and large breeds, give ʒj. to ʒij.

Above doses according to size and age. Also paint the mouth and throat with above mixture.

#### FEVER-MIXTURE.

Pot. nitratis ... ʒiss.  
Spt. æth. nit. ... ʒiij.  
Syrup. simplicis ... ʒj.  
Aq. ad ... ʒviij.

Dose.—Poms, etc., 20 to 60 drops; terriers, ʒij. to ʒiv.; collies and large breeds, ʒss. to ʒj.

Carbolic-mixture, twice daily; fever-mixture, twice daily. To be given alternately every four hours.

THE DIARRHŒA FORM.—Treat with fever mixture; also give salol mixture, as follows:—

Salol. ... gr. 160  
Bismuth. carb. ... ʒss.  
Pulv. tragac. co. ... ʒj.  
Aq. chlorof. ad ... ʒviij.

Dose.—Poms, ʒj.; terriers, ʒij.; large breeds, ʒss.

Give fever and salol mixtures alternately every four hours, or two doses of each mixture daily.

Also apply mustard to stomach. Make up Colman's D.S.F. mustard into a paste with warm water, and rub well in.

LUNG FORM.—Give fever mixture two or three times a day, and apply mustard as above to chest and throat. Parke, Davis & Co. state that their tablets of triple glycono-phosphates with nuclein are a good remedy for distemper, and several vets. declare chloretone to be a specific for chorea if given on appearance of first symptoms, but I have never had an opportunity of testing them. Careful nursing and light diets—milk, Lemco or Bovril, with whisky or brandy added if patient is weak. Unfortunately, fanciers are rather slow "to shell out" a few pence for advice, and in many cases the dogs are too far gone for any treatment to be successful. Trusting these remarks may be useful to a few brother chemists and fanciers, as my "doggy" knowledge has made many customers and friends—Yours truly,

DANDIE DINMONT (20/7).

#### Norwegian Cod-Liver Oil.

SIR,—The Lofoten fishing is now closed, and the result is somewhat disappointing, though not unexpected. The price of cod-liver oil therefore for this year will no doubt remain high; to date, the catch in Lofoten is about 3,400,000 less than at the corresponding period last year, and the fishing has closed a week or ten days earlier, prices per barrel of 25 gallons ranging from 160*s*. to 165*s*., as compared

with 110s. to 115s. at the same time of last year. In a report I have to hand to-day, dated April 10, the following significant remark occurs: "A greater proportion than ever before of the fishermen from the Lofoten fishing will participate in the Finnmarken fishing." It is therefore expected that this fishing will give an output of importance; stormy weather has prevailed during the last fortnight, but the prospects are good. The Norwegian is both fisherman and farmer, and usually when the Lofoten fishing is over a good many go home with their gains to work on their farms for the all too brief summer, but if the Lofoten fishery has been poor, many of the less fortunate are tempted to have another try at Finnmarken. Although it is well understood that the oil made in Finnmarken is not equal in quality to that made on the Lofoten Islands, yet a good catch in Finnmarken invariably has the effect of lowering the price all round, so that from that cause we may see, later on, a still further decline in the present prices, but to those to whom quality is the first consideration, the present offers the best opportunity of buying so as to secure the oil being in its very best condition. It is impossible to refine all the oil made during the busy fishing season, and oil refined later in the year is likely to suffer both in colour and taste from the presence for several weeks or months of slight traces of moisture or animal matter, which it is impossible to avoid in the first process of manufacture. A poor catch is not entirely the result of the scarcity of fish, but is also influenced by the number of men engaged in the fishing, hence the importance of the fact that more men than usual have, or are, going to Finnmarken.

Yours truly,

W. BOUSFIELD.

#### The Curriculum—and After.

SIR,—The Curriculum has now been discussed from many points of view, and there appears to be a general consensus of opinion that as the pressure of competition is from below our ranks, and not from within, any change ending to reduce the number of qualified pharmacists would result in the vacant places being occupied by unqualified persons, thus producing an opposite result to that aimed at. While cordially agreeing with this view, the question should be raised, *Is it necessary for our Society to relax its efforts to raise the standard of pharmaceutical efficiency on this account?* If we consider the active progressive work which is being accomplished by our technical colleges for other crafts, to which attention was drawn by the writer in your columns on February 25, and which overshadow the more modest efforts of our Society, it would appear to be urgent that we should redouble our efforts to do our best to raise the efficiency of the pharmacist to the highest possible level. It is by this means alone that competition from outside bodies can be successfully opposed. The following suggestions are offered in order to illustrate this:

*The Apprentice.*—Attention has already been called to the fact that the proposed three years' interval between the Preliminary examination and the Qualifying examination will accomplish nothing *if these youths are allowed to remain in a condition of mental stagnation during the interval.* Probably the majority of our apprentices reside beyond the reach of technical schools, and our Society should certainly endeavour to reach these youths by extending the system adopted in the Corner for Students of THE CHEMIST AND DRUGGIST, which has proved so useful for so many years, or by some postal system, similar to some of those which have been of great service in connection with other crafts and professions.

*The Higher Qualification.*—While the general standard of education in England has progressed by leaps and bounds, the higher qualification of the Pharmaceutical Society remains much as formerly. To raise this qualification would undoubtedly reduce the number of graduates, but I would suggest that to include in our ranks a smaller number of men with a qualification *recognised as equal to a University degree* would raise our craft in public estimation, and would enable us to command greater respect when necessity arises to approach Parliamentary or other bodies. Might we not aspire to include in our ranks one or two hundred men with a recognised degree of Doctor of Pharmacy.

*Post-graduate Courses of Instruction.*—When the Spec-

tacle Makers' Company and the Institute of Ophthalmic Opticians organised a system of education for opticians, probably a greater number of pharmacists took advantage of the courses of study provided than any other class of person. Was not our Society shortsighted in allowing a need for education which evidently existed within our ranks to be supplied by outside bodies? If the duty of assisting horticulturists and agriculturists in combating fungi and insect pests had been taken in hand more vigorously by chemists *at an early date*, and assisted by post-graduate lectures, might not our trade have been spared from the complications which have been caused by the Poisons and Pharmacy Act of 1908? Would it not be wise for our Society to keep a more watchful eye for other necessities which may arise, in order to supply them before other bodies step in, and thus avoid the control of our education passing into other hands? The leading feature of any system of post-graduate instruction should certainly be courses of instruction in pharmacy to enable the pharmacist to keep his knowledge of this subject up to date. Medical men living in large centres now send their pathological analyses to pathological institutions, but away from these centres to do so must cause delay. Might it not be possible to secure some work of this character for pharmacists by providing courses of instruction in pathological analysis and toxicology? My own experience convinces me that good results might accrue if this suggestion were followed. Some pharmacists profit by undertaking analytical work for neighbouring brewers, linseed crushers, and other manufacturers. Post-graduate courses in commercial analysis might be a valuable development of our educational system. The combined commercial and scientific training of the pharmacist lends itself to such work. Many other suggestions could be made if space permitted.

*Commercial Education.*—This has been almost raised to a technical science in modern times. It is by means of their superior commercial organisation that the emporiums and company businesses have pressed so hardly upon smaller concerns. The pharmacist has suffered as much as any. Is our Society wise in entirely neglecting this side of our education, particularly as it would lend itself so well to the postal system of instruction? Many a young pharmacist has suffered loss on first commencing to trade on his own account through lack of ordinary commercial knowledge. Others have realised too late the importance of organising their business in a manner which, when they desire to part with their business, should enable them to convince possible purchasers as to the genuineness of their concern.

In conclusion, there is clearly a wide scope for progressive educational work for our Society to organise, which would render the coming pharmacist even more efficient than the modern man, and enable him to hold his position among the most intelligent craftsmen, in the face of modern competition, without risk of reducing the ranks of qualified men. I can only conclude by reminding our Society of the advice given to England by King George V., "Wake Up" and look ahead!

Yours faithfully,

J. C. SHENSTONE.

[The Society's power of adding subjects to the examination is limited. For registration under the 1868 Act the examination is to be "such as is provided under the Pharmacy Act for the purposes of a qualification to be registered as assistant under that Act," which mentions the Latin language, botany, materia medica, pharmaceutical and general chemistry, and such other subjects as may from time to time be determined by by-law. Any other subjects must be *ejusdem generis* with those specified, and such things as business knowledge and bacteriology, which are not specially germane to the dispensing of medical prescriptions and the sale of poisons, would be *ultra vires* most probably.—EDITOR C. & D.]

#### Dispensing Notes.

This section is for the discussion and solution of dispensing problems and prescriptions received by "C. & D." readers. We are always pleased to receive the opinions of readers for publication. "The Art of Dispensing" ("C. & D." Office, 6s.) is the standard book of reference on this subject.

#### Borate and Zinc Lotion.

SIR,—*Re* the dispensing problem in the C. & D. of April 22 by "Perplexed" (10/43), knowing that borax is incompatible

with mineral acids (and the sulphuric in  $\text{ZnSO}_4$  being such). I neutralised the alkaline borax with dilute sulphuric acid, using litmus-paper to procure accuracy or therabouts. When perfectly neutral I added the boric acid and shook well until dissolved, then added the zinc sulphate previously dissolved in a little water. The solution was perfectly clear, and no flocculence has appeared after two days' standing. Is this how your correspondent made it?

Yours faithfully,  
W. J. P. (19/8.)

### Legal Queries.

Consult the Legal Advice Section of "The Chemists' and Druggists Diary," 1911, p. 435, before writing about your difficulty.

*Lux* (11/33).—You will find full particulars in regard to the registration of the title of a proprietary article in the *C. & D. Diary*, p. 205, under "Trade-marks Registration."

*Dubious* (17/38).—There is nothing dubious about your queries. They are answered in the *C. & D. Diary*, p. 462, under "Dentists." One of the objects of giving legal information of this nature in our *Diary* is to save our subscribers the trouble of writing when such difficulties as yours arise.

*M. W. S.* (18/4).—There is no doubt of the fact that if a dutiable medicine bearing a  $1\frac{1}{2}d.$  stamp is sold by anyone in Great Britain at any advance upon  $1s. 1\frac{1}{2}d.$  the sale is illegal, a  $3d.$  stamp being necessary. It has, in fact, been questioned if even the sale at  $1s. 1\frac{1}{2}d.$  is legal, but custom has sanctioned this.

*McL. Rose* (14/62).—In regard to your questions, we cannot add to the information given under "Advertisements" in the *C. & D. Diary*, p. 459. The manner in which the hypothetical cases that you submit are carried out would have much to do with their legality, and we could not express an opinion until we saw the actual advertisements.

*Chemicus* (11/27).—A single act of sale of a poison by an unqualified person may mean three offences: (1) the actual sale; (2) keeping open shop for selling; (3) acting contrary to Section 3 of the 1908 Act. The question of the use of the title is also involved. The penalty in each case is  $5l.$ , and is irreducible. As to recovery from minors, see the paragraph on that subject in the *C. & D. Diary*, p. 443.

*Optics* (18/20).—(1) The headache speciality you send is unstamped because it is an entire drug, and such drugs may be recommended or held out for the prevention, cure, or relief of human ailments without incurring medicine stamp-duty (see the paragraph on "Drugs" in the *C. & D. Diary*, p. 449). (2) You had better write again to the Spectacle Makers' Company and the British Optical Association.

*Wedge* (10/68).—The Excise officer is quite correct in his statement to you that you cannot sell wines until the grant of the licence to you has been confirmed by Quarter Sessions. A provisional grant and order of confirmation is not valid until it has been declared to be final by order of the Licensing Justices. This is laid down by Section 22 of the Licensing Act, 1874. Section 19 of the 1902 Act requires that off-licences should be confirmed in like manner as other licences.

*Sanol* (13/50).—(1) A limited company conforming to the conditions of Section 3 of the Poisons and Pharmacy Act, 1908, may sell "Known, Admitted, and Approved Remedies" under the same conditions as registered chemists. (2) The agreement which you have entered into as regards Sunday closing appears to be voluntary. It is impossible for us to say what the penalty for breaking that agreement may be. (3) A month's notice is usual in the retail drug-trade in England.

*Employer* (16/34).—You appear not to have employed the female apprentice longer than the statutory hours—seventy-four per week. You will find full information on the subject in the *C. & D. Diary*, p. 465; see also "Factories and Workshops" on p. 463. If the nature of the apprentice's work is such as to bring her under the Factory Acts, she should not be employed after 8 P.M. It is perfectly legal to keep an apprentice or other employé at work on a Bank Holiday. Such holidays are compulsory only upon banking establishments.

*Medalo* (10/28) puts this problem: "A. has borrowed money on mortgage from B., whom he now proposes to repay. He has also borrowed by a second mortgage on the same property from C. On payment ought A. to receive back the title-deeds from B., or has C. any right to expect them? C. is B.'s solicitor and holds the deeds for him, and at the same time is the person who has lent A. the money on the second mortgage. Has C. any claim to expect A. to deposit—i.e., leave—the deeds with him as security for the money owing to him?"

It is the coincidence of C. standing in the double position of solicitor for B. and lender on the second mortgage that makes me desire to know if he can raise any objection to the deeds being returned to A., which B. would naturally expect to do." [C. being second mortgagee, and also solicitor for the first mortgagee, has no doubt given to B., the first mortgagee, formal notice of his second mortgage, and upon A. paying off B.'s mortgage C. will be entitled to have the deeds handed to him by B., such deeds to be held by C. until his mortgage is paid off.]

*Star* (12/38) is a shareholder in a private limited company, and in its articles of association is incorporated the greater part of Table A of the first schedule to the Companies (Consolidation) Act, 1908. One of the articles so included is No. 108. (1) Is it obligatory for the directors to carry out this article? (2) In the event of its not being carried out, are there any penalties? (3) Penalties, if any, what would they be? (4) Would these penalties, if any, fall equally on the managing director, other directors, and secretary? [Clause 108 of Table A provides as follows:

"A copy of the balance-sheet and report shall, seven days previously to the meeting, be sent to the persons entitled to receive notices of general meetings in the manner in which notices are to be given hereunder."

The effect of this clause is to make it obligatory on the directors to deliver a balance-sheet as agreed, and in default we think subscriber, who is a shareholder, could apply to the Court for an order that the directors should comply with the articles of association and deliver the balance-sheet, but we know of no penalty.]

### Miscellaneous Inquiries.

We do not as a rule repeat information given in this section during the past twelve months. When references are given to past issues, these should be consulted. Back numbers for the past five years can generally be obtained from our office at the published prices. We do not undertake to analyse and report upon proprietary articles.

*Nostrums* (9/38).—(1) **PERNICIOUS ANEMIA** is looked upon as incurable, the duration of the disease usually being from six to twelve months. Iron preparations are useless in pernicious anæmia, and occasionally even injurious. Most of the recorded cases of recovery have been treated with arsenic, which, although not a specific, generally prolongs life. Liquor arsenicalis is given in 5-minim doses, rapidly increased to 10 minims, three times a day. (2) **RINGWORM OINTMENT** for use in India:

Chrysarobini	...	...	...	5j.
Ac. salicylici	...	...	...	5l.
Adipis lane	...	...	...	5v.
Ung. paraffini	...	...	...	3xiiij.
Misce.				

*Act. B.* (258/54).—We cannot undertake to examine a powder which is sent without any indication of its origin and uses.

*J. M.* (259/14).—Boric acid would appear to be the safest and least objectionable preservative for dried bread-crumbs destined for use in sausages.

*Inquisitive* (10/55).—The unpleasant odour which is given off from red-hot iron when water is spilt on it is sulphuretted hydrogen most probably.

*Nostrum* (10/17).—Manufacturers of proprietary articles whose products are on the P.A.T.A. list pay the Association  $5l. 5s.$  a year. The Council of the Association must approve the articles and the profit attached to them before they are put on the list. It is not obligatory on any manufacturer to have his preparations protected. The Medicine Stamp Act does not extend to Ireland, nor is it necessary to patent any proprietary article.

*Medalo* (10/28).—At least a shilling an hour ought to be paid to a qualified man for dispensing in a hospital a certain number of hours daily. In fact, for six hours daily at least  $2l.$  per week should be paid.

*P. T.* (12/28).—**DUST-PREVENTIVE FOR ROADS.**—The use of calcium chloride and magnesium chloride as a dust-preventive depends upon the deliquescent properties of these salts. Calcium chloride is the more generally suitable material, and has several advantages over tar mixtures, which are also advocated for the same purpose. It is cheap, its chief sources being as a by-product in the ammonia-soda and Weldon processes, in boric and acetic acid manufactures, and in the mineral water industry. It is employed of the strength of 1 cwt. in 100 gals. of water, and is applied by means of the ordinary watering-carts. Messrs. Brunner, Mond & Co.,

Ltd., Northwich, publish a pamphlet entitled "The Road-Dust Problem Solved by the Use of Calcium Chloride," which you should write for.

Gregory (235/8) endeavoured to obtain the authority of the Board of Customs and Excise to make BAY RUM with industrial methylated spirit, but was unsuccessful until we suggested that he should use the following formula:

Oil of bay	...	...	10 dr.
Oil of pimento	...	...	1 dr.
Extract of quassia	...	...	1 oz.
Saponin	...	...	2 dr.
Acetic ether	...	...	2 oz.
Industrial spirit	...	...	3 gals.
Water	...	...	2 gals.

Dissolve the oils and acetic ether in the spirit; separately dissolve the extract in the water and gradually add this to the spirit solution; add the saponin and set aside for at least eight days, then filter.

"Gregory" has submitted the formula to the Board, and he has obtained permission to use industrial spirit in preparing it, subject to the further condition that "the proportion of true quassia extract is not less than 0.05 per cent. calculated as the dry extract." The question now arises, how much dry matter does extract of quassia contain? [The amount of moisture in such extracts as this varies from 15 to 25 per cent., but there is no recorded figure as to the precise amount, not even in Squire's "Companion," but Messrs. Squire & Sons inform us that they have carefully determined the amount of dry extract in extract of quassia, and find that 100 parts of extract contain 82.8 parts of dry extract and 17.2 of water; the determination was made on an extract manufactured in their own laboratory. A commercial extract obtained from a well-known manufacturing house contained 89 parts of the dry extract and 11 parts of water. Another sample manufactured in their laboratory contained in each 100 parts 79.2 parts of the dry extract and 20.8 parts of water. The following figures were yielded by commercial extracts obtained from first-class manufacturing houses: A. 75.5 parts dry extract, 24.5 parts water; B. 75.7 parts dry extract, 24.3 parts water; C. 80.4 parts dry extract, 19.6 parts water; D. 72.5 parts dry extract, 27.5 parts water. The percentage of dry extract thus appears to vary from 72½ to 89; the percentage of water from 11 to 27.5. It is perfectly safe, therefore, to regard 80 per cent. as the amount of dry extract in the preparation, so that the 1 oz. in the above formula is more than sufficient to meet the Revenue requirements. It should be noted that in "Gregory's" case the whole ounce must be employed, as that is the formula submitted by him. It should also be noted that the approval of the Board of Customs and Excise must be obtained by each individual who desires to manufacture the above or any other hair-wash with industrial methylated spirit.]

F. R. (5/15).—FACE-MASSAGE CREAM.—This is the stearine type of skin-cream, two new formulae for which were given in the *C. & D.*, April 22, index folio 592.

J. D. (15/34).—VETERINARY WOUND-DRESSING used with a syringe.—This is hydrogen-peroxide solution.

W. H. G. (4/49).—GILDERS' SIZE.—The powder is an isinglass preparation, and is used for making what is known as water-size as distinguished from the size which has an oil basis.

W. A. W. (10/56).—SOLUBLE ESSENCE OF LEMON containing terpeness oil:

Oil of lemon	...	...	2 oz.
Terpeness oil of lemon	...	...	2 drams
Oil of limes	...	...	2 oz.
Rectified spirit	...	...	2½ pints
Tincture of lemon	...	...	4 pints
Essence of rose	...	...	3 oz.
Lemon colour	...	...	1 oz.
Water	...	...	20 oz.

Mix.

The accessory formulas are as follows:

#### *Tincture of Lemon.*

Lemon-peel	...	...	12 lb.
Rectified spirit	} of each	...	1 gal.
Distilled water		...	

Macerate one month.

#### *Essence of Rose.*

Otto of rose	...	...	2 drams
Rectified spirit	...	...	16 oz.
Water	...	...	3½ oz.

Triturate the otto with a little kaolin before adding to the spirit.

#### *Lemon Colour.*

Lemon yellow	...	...	1 lb.
Water	...	...	2 gals.

Dissolve by heat, and filter when cold.

*Pulve* (17/55).—(1) MASSEURS usually employ boric acid to reduce friction when massaging the body, but French chalk is sometimes used for the same purpose. (2) LOCOCK'S HAIR-LOTION is used by rubbing it into the skin of the head, the employment of a small piece of Turkey sponge being the best means of doing this.

*Glaze* (6/55).—You must tell us something about the varnish you send—its uses and the special properties which have caused you to send us a sample.

W. J. J. (1/47).—Will you indicate the formula for dry-shampoo liquid which has yielded you an unsatisfactory result?

T. F. (12/35).—BOOK FOR CONFECTIONERS.—Gunter's "Modern Confectioner," published by Dean & Son, is the kind of book your customers will find useful.

H. S. (11/3).—RASPBERRY ESSENCE.—The following is "a good recipe for the synthetic essence:

Powdered orris-root	...	...	24 oz.
Rectified spirit	...	...	5 pints
Water	...	...	2 pints

Macerate seven days, press, and filter. To each pint add:

Butyric ether	...	...	4 dr.
Acetic ether	...	...	1 dr.
Amylo-acetic ether	...	...	½ dr.
Oil of orris	...	...	1 dr.
Rectified spirit	...	...	2 oz.
Chloroform	...	...	½ dr.
Colour	...	...	a sufficiency

The colouring-matter employed in the essence is made as follows:

Croceine scarlet	...	...	1 oz.
Boiling water	...	...	20 oz.

Dissolve.

R. S. (218/20).—GARGET OINTMENT.—This ointment, which is used for applying to cows' udders when inflamed, is made as follows:

Lin. camph.	...	...	5x.
Cerae flavæ	...	...	5j.
Ferri hydroxidi	...	...	5j.

Melt together.

Some practitioners prefer an ointment containing ung. hydragr. in addition to camphor.

*Argentine* (Buenos Aires) (9/16).—CARBON TETRACHLORIDE is a liquid somewhat resembling chloroform. It boils at 76.5° C. and has a sp. gr. of 1.6319 at 6° C. The process of manufacture is as follows:

Two parts of aluminium chloride are boiled with 100 parts of carbon bisulphide for about half an hour, the liquid being then cooled and treated with a current of pure dry chlorine until the weight has increased to 363 parts. To destroy the chlorosulpho-products contaminating the carbon tetrachloride the liquid is treated with about 0.05 per cent. of iron-dust or other analogous metal and gently heated, the final products of the reaction being carbon tetrachloride and sulphur chloride. The former is separated by distilling at 60°-90° C., and is purified by washing with alkaline-water and redistillation.

Carbon tetrachloride is a solvent for fats, resins, stearin, and paraffin; is used for degreasing in the textile industry and as a varnish solvent and paint diluent. It is a capital thing for removing grease or tar from clothing, and does not leave a halo as benzine often does. The great advantage of carbon tetrachloride is its unflammability; it can be heated and distilled without danger. It has also a curious power of rendering inflammable liquids unflammable when mixed with them, this property being utilised in the preparation of inflammable benzine and for rendering paints and varnishes unflammable. It has also been proposed as a fire-extinguishing liquid and for power purposes. As a dry shampoo for women's hair carbon tetrachloride had acquired a large sale a few years ago, but a fatality caused by its use has called attention to its dangers when employed for this purpose.

C. S. C. (5/68).—BOOK ON NURSING.—Harrison's "Home Nursing" (Macmillan, 4s. 6d.), or Oxford's "Handbook of Nursing" (Methuen, 3s. 6d.).

*Nipper* (234/35).—RED-WATER CURE.—You give no particulars as to the source of this powder and as to how it is used.

**F. S. (16/36).—TALKING-MACHINE RECORDS.**—We have at various times indicated the means by which the wax composition used for talking-machine records are hardened. In Edison's phonograph patent the composition was declared to be "paraffin or other hydrocarbons, waxes, gums, or lacs"; while the graphophone patent specification indicated white beeswax 1 part, paraffin 2 parts. Since then carnauba wax, metallic soaps (such as lead-plaster) and ceresin have been introduced into the composition. In *THE CHEMIST AND DRUGGIST*, October 9, 1909, p. 592, was given the specification of a composition containing sodium stearate, sodium aluminate, carnauba wax, and stearic acid.

**G. E. G. (12/29).**—We are not able to suggest how you can still further whiten the prepared chalk of which you send us samples. The orthodox manner of adding a little smalts you have already carried out. The sample marked "Dried in warm chamber" appears to us to be the whitest.

**F. I. H. (12/17).—SODIUM PERBORATE.**—The chemical formula is  $\text{NaBO}_3 + 4\text{H}_2\text{O}$ , but commercial sodium perborate contains some borax. It is prepared by various methods: (1) electrolysis of cold concentrated solution of sodium borate; (2) interaction of molecular proportions of sodium peroxide, boric acid, and hydrochloric acid in the cold; (3) mixing an aqueous solution of 76.5 parts of borax, 21.6 parts of 90-per-cent. sodium hydroxide, and 950 parts of 3-per-cent. hydrogen peroxide, adding concentrated sodium-chloride solution until permanent turbidity is produced, and cooling to allow the sodium perborate to deposit. Sodium perborate is employed for removing residual thio-sulphate from plates and prints in photography, for making hydrogen peroxide (*C. & D.*, November 23, 1903, p. 846), as a disinfectant, and for bleaching purposes. Although hydrogen peroxide is as good or better than sodium perborate as a bleaching agent, the perborate has the advantage that it can be incorporated with soaps and washing-powders. Several preparations containing sodium perborate are on the market. "Persil" is a mixture of soap, soda-ash, sodium silicate, and sodium perborate; "clarax" contains borax, sodium phosphate, and sodium perborate; "ozonit" resembles "persil" in composition; "perborin M" is a mixture of soap, alkali, and sodium perborate. These mixtures are designed to meet the requirements of the laundry trade for a combined washing and bleaching agent.

**H. D. (260/6).**—"How to Do the Photographic Trade" was the subject of articles in *The Chemists' and Druggists' Diaries* for 1896 and 1900. "Pharmaceutical Formulas" has a special chapter dealing with developers, etc., for chemists' sale.

## Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," April 15, 1861.

### Fluid Extracts.

Five pages of this issue were devoted to an advertisement by Messrs. Tilden & Co., New Lebanon, N.Y., U.S.A., in which they intimate that they have thought it advisable to conclude arrangements with a London house to act as British and Colonial agents for their manufactures, lists of which are given. These include alcoholic and hydro-alcoholic extracts, or solid extracts; fluid extracts; alkaloids and resinoids; sugar-coated pharmaceutical pills and granules. Tabular lists of each of these are given, and the following is the statement under fluid extracts:

"Fluid extracts represent for each fluid ounce one ounce of the crude material, the exceptions being the compounds prepared according to the Pharmacopœia. It is, therefore, easy to estimate the relative quantity in preparations, compounds, or prescriptions, when the crude material or powder has heretofore been used.

"We do not intend that any variations in their strength shall occur, so far as it is in our power to prevent, and intend that every article shall represent a given quantity of crude material of ascertained average quality.

"They are put up in 16- and 4-oz. bottles, or in bulk in any sized package. If ordered in bulk, a reduction in price will be made. Each package is labelled with directions and dose. The specific gravity of fluid extracts varies with the composition of the plants whence they are derived. In some instances the pound by weight will not measure 16 fluid ounces, and, as our formulæ have, in all cases, been brought to this standard, we use the one uniform standard of 16 fluid ounces, irrespective of specific gravity."

The list that followed comprises the common names of the drugs with their botanical names, and quotations for the fluid extracts in 5-lb. bottles, 1-lb. bottles, and per dozen 4-oz. bottles.

## American Pharmaceutical Association.

### Too Much Materia Medica in Pharmacopœias.

**A**T the April meeting of the City of Washington branch Dr. Murray Galt Motter discussed the use and advantage of a restricted materia medica, and called attention to the efforts that have been and are being made in the United States to bring about reforms in therapeutic practices. He pointed out that the need for limiting instruction in materia medica subjects to a restricted list of substances is being recognised by teachers in medical schools, and that the general trend of this tendency is well illustrated by the resolution adopted by teachers in the medical schools in Philadelphia at an informal conference called by Professor Joseph P. Remington, on February 3, 1908, as follows:

"Resolved, that it is of the utmost importance for accuracy in prescribing, and in the treatment of disease, that students of medicine be instructed fully as to those portions of the United States Pharmacopœia which are of value to the practitioner."

To illustrate the fact that the need for restricting the materia medica taught in medical schools is being recognised outside the United States, Dr. Motter exhibited a list of titles adopted by the teachers and examiners of the University of London as a basis for examining candidates for degrees as well as licences. This list was furnished by Dr. A. R. Cushny, who, in a recent interview, assured Dr. Motter that unless the forthcoming edition of the British Pharmacopœia is more limited in scope, and more representative of the best that is available in materia medica, British teachers of the latter subject would find it necessary to ignore the Pharmacopœia entirely, and limit their teaching to the restricted list of medicaments mutually agreed upon. Dr. Motter expressed the belief that much the same conditions prevail in the United States, and that unless the scope of recognised national standards can be restricted to a reasonable number of articles, the books themselves must be ignored entirely by medical schools. He characterised the present Pharmacopœia of the United States as an illustration of "would-be science," the "National Formulary" as "a hybrid between science and commercialism," and N.N.R. as "a sop to the commercial Cerberus."

The subject was further discussed by Messrs. Kalusowski, Flemer, Hilton, Hunt, and Wilbert, and the general trend of much of the discussion suggested the desirability of having the Pharmacopœia of the United States restricted to important medicaments so that it might serve as the basis for materia medica instruction in medical schools. Dr. Reid Hunt expressed the belief that at present the physician's part in the revision of the Pharmacopœia is but a minor one, and that much of what the better-informed medical men might have to say is discounted by the fictitious value that is accorded to the reputed needs of the less conscientious or less competent practitioner who is willing to continue the use of substances that appear to have a recognisable medicinal value. Mr. M. I. Wilbert called attention to some of the recent comments that have appeared on this same subject, and quoted Dr. D. L. Edsall, who in his address as Chairman of the Section on Pharmacology and Therapeutics of the American Medical Association, pointed out that the Pharmacopœia of the United States is now used by but few teachers of materia medica and is little known to medical practitioners. He added:

"Revision may make it better or may make it even worse so far as its usefulness to students and practitioners is concerned, according as it is intended to make it purely a reference book or also a practical working book; in other words, whether it is revised upward or downward. Unless marked changes are made in it, however, it will remain as it is now, chiefly a name to the vast majority of the medical profession, and will render no appreciable service in improving therapeutic practice."

The rest of the proceedings were of local interest.

**PRICE TICKETS.**

Full Illustrated List on Application.

This illustration represents No. 5005, with Glossy Black figures on White Enamelled Card, stocked in all usual prices from 1d. to 21s. The actual ticket is slightly larger than here shown.

**PRICE 1/9 per gross.**

**Dudley & Co., Window Ticket Experts,  
Holloway, LONDON.**

2/6

**HOW TO INCREASE YOUR BUSINESS.**

Have good ideas; act upon them. Make your window attractive by smart displays. Advertise your Specialities in an up-to-date manner. Keep your Specialities up-to-date. Make them yourself. That is my business-pulling System in brief. I think the ideas out for you—all you have to do is to carry them out. Now send for a copy of my Booklet further explaining my methods—post free to Pharmacists only. If you are in doubt whether it is possible to increase your business, just write, and I will give you my candid idea on the matter.

**WILLIARD ALLISON, Pharmacist & Business Specialist, RETFORD.**

**EXCHANGE COLUMN****FOR DISPOSAL.****BOOKS AND PERIODICALS.**

DISPENSATORY OF U.S.A." (2 vols.). 7s.; "Materia Medica, Pharmacy and Therapeutics," by Potter, 5s.; "Eye Defects (Knowles): How to Detect and Correct them," 2s.; Lindley's "British Flora," 1s. 6d.; "Optician," several years, unbound, what offers? "W. H.," 227 Kensington, Liverpool.

**DRUGS AND CHEMICALS.**

AT. ergot. liq., 7 lb., what offers? "C.," 194 Crystal Palace Road, East Dulwich.

**DENTAL.**

SH'S dental chair; cost £10; for £4 cash net; perfect condition. TOTTLE, Chemist, Liscard.  
VERY fine modern American dental chair, adjustable every way, perfect condition, bargain. £5 5s. net; seen any time. BLOOMFIELD, 186 South Lambeth Road, S.W.

**SHOP FITTINGS.**

AHOGANY centre showcase, glazed plate-glass all round, door at back, two plate-glass shelves, 2 ft. 3 in. by 2 ft. by 5 ft. 6 in. high, genuine bargain, brand new, £10 10s. JONES, 119 South Lambeth Road, S.W.

**MISCELLANEOUS.**

URPLUS Stock.—Six gross each 30-gr. and 15-gr. earthenware jars, nickel tops fitted 8s. gross and 7s. gross respectively, or reasonable offer. 258/24, Office of this Paper.  
MERICAN soda-fountain, perfect working order, 4 syrup tanks, siphon, Bourdon's pressure gauge; cost £26; as good as new. HENDERSON, Chemist, Didcot, Berks.  
URPLUS stock, good condition.—5 lb. 6d. Lysform toothpaste; 4 lb. 6d. Lysform mouth-wash; 2 1 lb. Martindale's syrup, iodo tannic; 3 4s. 6d. ditto lithion; 4 2s. 6d. ditto tab. nitroglycerin, gr. 1/100th; 3 2s. 6d. ditto vesettes lithii citras; 3 2s. 6d. ditto vesettes sodii sulph.; 2 2s. 6d. ditto vesettes sod. magnes. aperient; 2 2s. 6d. ditto vesettes sod. magnes. c. caffeine; 2 Martindale's portable inhalers; whole or part at half wholesale; carriage forward. 268/40, Office of this Paper.

**WANTED.**

FRENCH Codex. State condition and price to "R. R.," 323 Walworth Road.  
NEODORA: large size; any reasonable quantity. SHARMAN, Northwood, Middlesex.  
PLATINUM, any form; utmost value remitted. ROWSELL, 11 Crebor Street, Dulwich.  
RUBEL ointment, all sizes. Lowest prices, BROMLEY, 9 Walter Street, Prestwich, Manchester.  
CASH register wanted, state price and make, National principle preferred. W. PILLING, LTD., Chemists, 192 Hyde Road, Manchester.  
OPTICAL books; Minor. Major Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo Liverpool.  
MR. SPRAGGETT, 1 Station Bridge, Harrogate, England, solicits the favour from brother Chemists over seas of some specimens of the postage stamps of their country; in return he will be pleased to correspond and send out English periodicals and magazines or other small requirements. R.S.V.P.  
CHEMIST AND DRUGGIST," January 11 and 18, July 26, August 2 and 16, October 14, 1902; January 31, February 7 and 28, September 12, December 19, 1903; August 13, 1904; January 7 and September 9, 1905; December 28, 1907. Quote price to G. E. STICHERT & Co., 2 Star Yard, Carey Street, London, W.C.

**PATENT SPECIFICATIONS.**

Printed copies of the following specifications are on sale (8d. each) at the Patent Office, 25 Southampton Buildings, London, W.C., a fortnight after the notice of acceptance has appeared in the "Official Journal" (Patents) of the given dates. Persons desirous of opposing the grant of a patent must do so in the prescribed form within two months from the date of the "Journal" in which the notice appeared.

**Specifications Accepted.**

March 29, 1911.

- APPARATUS FOR ADMINISTERING MEDICAMENTS BY INHALATION. 3908/10. Stevenson.  
PREPARING CHEMICALLY PURE SODIUM CITRATE. 4376/10. Szirmai.  
MANUFACTURE OF DEXTRIN. 7032/10. Wulkan.  
PREPARATION OF TUBERCULIN. 7669/10. Henri, Helbronner & Von Recklinghausen.  
MANUFACTURE AND MANIPULATION OF SOLID CARBON DIOXIDE. 10378/10. Hall.  
RHEUMATISM MEDICINE. 12386/10. Upchurch.  
HYPODERMIC SYRINGES. 12531/10. Dental Manufacturing Co., & Tugman.  
FINELY DIVIDED ANTIMONY FOR THERAPEUTIC PURPOSES. 13755/10. Plimmer.  
PRODUCING COOKED FOOD IMPREGNATED WITH CERTAIN BACTERIA. 15312/10. Hutcheon.  
REMEDY FOR TUBERCULOSIS. 16632/10. Farbwerke vorm. Meister, Lucius & Brüning.  
LUBRICANT AND SCALE-PREVENTER. 20252/10. Rolyat.  
METALS OF THE ALKALIES OR ALKALINE EARTHS. 20386/10. Heys. (Nitrogen Co.)  
MERCURIC COMPOUNDS SUBSTITUTED IN THE NUCLEUS OF ALKYLATED OR HALOGENATED BENZOIC ACID. 23049. Farbenfabriken vorm. F. Bayer & Co.  
MACHINE FOR WRAPPING-UP TABLET-LIKE OBJECTS. 769/11. Eisele.

April 5, 1911.

- IMPROVING THE MECHANICAL AND ELECTRICAL PROPERTIES OF COPPER. 7657/10. Electrochemische Werke Ges.  
PRODUCTION OF HYDROGEN. 7718 and 7720/10. Dieffenbach & Moldenhauer.  
EXTRACTING ALBUMINS FROM PLANTS. 7735/10. Geisldörfer.  
APPLIANCE FOR USE IN ADMINISTERING MEDICAMENTS TO THE RESPIRATORY PASSAGES. 13686/10. Cadman.  
GALVANIC OR ELECTRIC SOCKS, ETC. 14739/10. Custance & Miller.  
CRUDE OIL SOAP AND SOAP-LYE MANUFACTURE. 1492/10. Cassel & Steinger.  
METHOD OF PRESERVING EGGS. 15309/10. Prenzlau.  
ESTERS OF THE HYDROALCOGENA ADDITION PRODUCTS OF QUININE. 15560/10. Johnson (Vereinigte Chininfabriken Zimmer & Co. Ges.)  
OBSTETRIC DEVICES. 16711/10. Barnes & Barnes.  
AERATED-WATER MACHINE. 17033/10. Schreff.  
APPARATUS FOR MAKING INFUSIONS. 20121/10. Bréjeux.  
COLLAPSIBLE AIR-CUSHIONS. 20347/10. Von Pebal.  
MANUFACTURE OF GAS FOR HEATING, LIGHTING, AND POWER PURPOSES. 22127/10. Tessier.  
NEW SOLVENTS FOR PYROXYLIN. 22309/10. Walker.  
CORK FEED-DEVICES FOR CORKING-MACHINES. 23570/10. Bergner.  
PHOTOGRAPHIC PRINTING CABINET. 24093/10. Mouzon.  
APPARATUS FOR CLOSING WAFER-CAPSULES. 26768/10. Schmidt.  
COUGH-MIXTURES. 29543/10. Sinclair.  
ALBUMINOUS COMPOUNDS OF GUAIACOL SULPHONATES. 30129/10. Busch & Von Wulffing.

April 12, 1911.

- PRODUCING HYDROGEN GAS. 7746/10. Sauer.  
APPARATUS FOR DISTILLING WATER, ETC. 8305/10. Cotterell.  
DAYLIGHT DEVELOPING APPARATUS. 8405/10. Warburton.  
FLUX FOR SOLDERING ALUMINIUM. 10790/10. Fries.  
MANUFACTURE OF HAIR-DYES. 11044/10. Bloxam. (Akt. Ges. für Anilin Fabrikation.)  
APPLIANCES FOR SURGICAL AND ORTHOPEDIC PURPOSES. 15276/10. Le Faguays.  
LIGHT-PROOF ENVELOPES FOR PHOTOGRAPHY. 15498/10. Niell.  
PAD FOR PRODUCING GLOSS ON ANIMALS' COATS. 16701/10. Blake.  
TREATING HALOGEN-HYDROCARBONS TO RENDER THEM SOLUBLE IN DILUTE SOAP SOLUTIONS. 17100/10. Fendler & Frank.  
TREATMENT OF TAR. 17639/10. Bartel.  
DISINFECTING-APPARATUS FOR USE IN FLUSHING CISTERNS. 18317/10. Burton.  
CARBURETTED-AIR PRODUCTION. 19181/10. Schachtel.

## COMING EVENTS.

This section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Sunday, April 30.

*National Union of Assistant Pharmacists, London Branch*, London College of Pharmacy, 323 Clapham Road, S.W., at 3 P.M. Election of officers.

Monday, May 1.

*Society of Chemical Industry, London Section*, Burlington House, Piccadilly, W., at 8 P.M. Mr. C. E. Sage on "The Testing of Creosote," and Dr. E. Divers, F.R.S., on "A Modification of Raschig's Theory of the Lead-chamber Process."

Tuesday, May 2.

*Bradford Chemists' Association*, Royal Hotel, at 9 P.M. Annual meeting and election of officers.

*Leicester Pharmaceutical Association*, Turkey Café, Granby Street, at 8.30 P.M. Annual meeting and election of officers.

Wednesday, May 3.

*Pharmaceutical Society of Great Britain*, 16 Bloomsbury Square, London, W.C., at 11 A.M. Council-meeting.

*Pharmaceutical Society of Ireland*, 67 Lower Mount Street, Dublin, at 5 P.M. Council-meeting.

*Daylight Saving Bill*. Public meeting in support of this Bill at the Guildhall, London, E.C., at 5.15 P.M. The Lord Mayor will preside, and among the speakers will be Mr. Winston Churchill, Home Secretary. Tickets can be obtained by sending stamped envelope to Mr. W. Willett, Sloane Square, S.W.

Thursday, May 4.

*Chemical Society*, Burlington House, London, W., at 8.30 P.M. The following papers will be communicated: "The Constituents of Bryony-root," by Dr. F. B. Power and Mr. C. W. Moore; "Note on the Action of Hydrogen Dioxide on Thiobenzanilide," by Messrs. H. Leete and E. de B. Barnett; "Purification of Acetic Acid," by Dr. K. J. P. Orton, Miss M. G. Edwards, and Mr. H. King; "The Detection and Estimation of Small Quantities of Acetic Anhydride in Acetic Acid," by Miss M. G. Edwards and Dr. K. J. P. Orton; "Tetramethylammonium Hyponitrite and its Decomposition under Heat," by Professor P. C. Ray and Mr. H. K. Sen; "Reactivity of the Halogens in Organic Compounds.—Part VI.: The Mechanism of Negative Catalysis," by Dr. G. Senter and Mr. A. W. Porter; "The Second and Third Dissociation Constants of Orthophosphoric Acid," by Mr. E. B. R. Prideaux; "Experiments on Tautomerism.—Part I.: The Tautomerism of the System X—CHR—CR—X showing the identity of the  $\alpha$  and  $\gamma$ -positions in the Glutaconic-acid Molecule," by Messrs. F. B. Thole and J. F. Thorpe.

*Leeds Chemists' Association*, Grand Restaurant, Boar Lane, at 9 P.M. Annual meeting.

*Röntgen Society*, 20 Hanover Square, London, W.C., at 8 P.M. Mr. C. W. Mansell Moullin, F.R.C.S., on "The Use of Radium in Malignant Growths," and Mr. E. S. Worrall, M.R.C.S., on "Rapid Radiography."

*North Kent Pharmacists' Association*, Royal Mortar Hotel, Woolwich, at 6.30 P.M. Annual dinner. Tickets (5s. each) from Mr. R. Feaver Clarke, Daneholm, Gravesend.

*Great Yarmouth Pharmaceutical Association*, 156 King Street, at 8 P.M. Monthly meeting.

*Liverpool Optical Society*, Bee Hotel, St. John's Lane, at 3 P.M. Meeting for election of officers. The Hon. Secretary is Mr. L. Moreton Parry, 163 Oakfield Road, Liverpool, who will send membership application form on application.

Friday, May 5.

*Royal Institution of Great Britain*, Albemarle Street, Piccadilly, London, W., at 9 P.M. Professor M. O. Forster on "New Organic Compounds of Nitrogen."

CHEMICAL ENGINEERING AND INDUSTRIES EXHIBITION.—Royal Agricultural Hall, London, N., from May 13 to 27 inclusive. Admission 1s.

FAIRCHILD SCHOLARSHIPS AND PRIZES.—The examination for these will take place in June. They are open to registered students of pharmacy in Great Britain and Ireland, and those who intend to enter should apply for application forms to Mr. A. E. Holden, Albert Chambers, 64-65 Holborn Viaduct, London, E.C. June 1 is the last date on which an application to sit for the examination can be received.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.—The week commencing May 8 is to be devoted to receiving members of the Society who choose to visit 17 Bloomsbury Square, London, W.C. The members' room will be in charge of one or other of the Society's officials from 11 to 1 and 3 to 5 each day. On May 10 there will be a reception at the Holborn Restaurant at 8 P.M., at which music and light refreshments will be provided.

## Bits from "Punch."

OUR old friend is as bright and lively in his CXI volume as he ever has been, and this week's number is rich, even pharmaceutically, as the subjoined extracts tell.

From "Charivaria" we learn that "Children are delighted to hear of the proposed establishment of an Oil Exchange. What to do with their cod-liver oil has been a problem which has hitherto baffled many of them."

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Blanche's letters are usually the best of parody. Writing to "Dearest Daphne" from Park Lane she tells that

"The new cure for everything is to dig!—*et, par conséquent*, we're all digging. We not only call a spade a spade; we catch hold of it and use it as such. Dear Sir William Kiddem, who's better than all the rest of Harley Street put together, says it's the cure for indy, and nerves, and brain-fag, and all those horrors that come of the strenuous life, and that it calls into play whole heaps of muscles that have been most shamefully neglected, and sets free a lot of nerve centres and fearful things of that kind. He makes us dig in real earnest, putting a foot on the spade and turning the earth up in style. There's nothing like it, my dear, for preserving the figure and compleck, and those who have neither dig in the hope of unearthing them. 'Olga' is showing some simply sweet digging suits, the coat fastening with little silver picks and spades, the skirt short and plain, high boots, gauntlet gloves, and a sort of coalheaver's hat in dark-grey silk or satin, the little silver picks and spades being repeated again in the hat-pins. Any afternoon you may see the old dowagers in Berkgrave Square, in full diggers' rig-out, going over to the square garden (with footmen carrying their spades and gauntlets), and setting to work, with the idea of digging up their far-away youth! Some of them shriek whenever they dig up a worm—but they go on digging."

Blanche proceeds to tell of a call to leave one of her darling Pompos's teeny-weeny cards "to inquire" for Fluffy Thistle-down's Pekinese Peky-peky, who had been "operated upon for appendy," and so on, to the extent of three columns of delightful drivel.

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"Our Ambulance Class" is the title given to an open-air sketch of nine young women. One "Fair First-Aider," who has had her left arm bandaged and put in a sling, is asking her companion, "I say, what's the poison for which you give an epidemic?"

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Some "Farming Notes" by "Punch's" "Agricultural Expert" are exceedingly amusing and may be judged by the following one on "Super":

"This is the stuff that you get in bags and spread on the ground. There seems some doubt as to the origin of the name. Is it not possible that it may be derived from a similar Latin word meaning 'above'? This would imply that it should be put on the top of the ground and not on the bottom. A practical farmer once told me of a young man from Cambridge who called it CaH(CO)<sub>2</sub>, but he very wisely asked him to move on to the next farm. He had a delicate baby, and thought it might be infectious."

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When writing in our issue of March 25 regarding "The Life of John Oliver Hobbes" (Mrs. Craigie), we said that it contains a biographical sketch by her father, "a wonderfully simple and expressive record, without ostentation, of a gifted daughter's life." We are glad to note that one of Mr. Punch's "Staff of Learned Clerks" is of the same opinion, and remarks: "Mrs. Craigie's father, Mr. John Morgan Richards, has done his work well, contributing a short but adequate sketch of her life that is marked by great simplicity and restraint."